

AD. RULE NO. \_\_\_\_\_

4/1/80

CERTIFICATION OF RULES ADOPTED

ARIZONA STATE DEPARTMENT OF HEALTH SERVICES  
(Name of Agency, Board, Commission, Department, Officer)

STATE OF ARIZONA  
DEPT. OF STATE

OCT 2 4 18 PM '79

ROSE MOFFORD

The undersigned, being the Deputy Director of  
(Title of Officer)

the Arizona State Department of Health Services hereby  
(Name of Agency, Board, Commission, Department, Officer)

certifies that attached hereto is a true and correct copy of

See Attachment

(A.C.R.R. Title No., Chapter No., Section No.)

which was duly See Attachment by this body  
(Adopted, Amended, or Repealed)

on the 25<sup>th</sup> day of July, 19 79.

Dated this 25<sup>th</sup> day of July, 19 79.

Arizona State Department of Health Services  
(Name of Agency, Bd., Commission, Dept., Officer)

Paul Wallerstein  
(Signature of Officer)

Deputy Director  
(Title of Officer)

(PLACE STAMP OR SEAL,  
IF ANY)

Certification, Attorney General's Office  
APPROVED & CERTIFIED pursuant to  
A.R.S. Section 41-1002.01 this

23<sup>rd</sup> day of July, 19 79  
Bob Corliss

BOB CORLISS  
Attorney General

NOTE: An original and two (2) copies of this Certification and rule changes shall be filed with the Secretary of State following certification by the Attorney General's office. The rule changes shall be typewritten on standard size paper, 8-1/2" x 11".

ATTACHMENT

## Amend:

- are not  
revisions!  
Submitted  
on 9/26/79  
(GAPR)*
- R9-3-101 - Definitions
  - R9-3-201 - Non-specific particulates
  - R9-3-202 - Sulfur dioxide
  - R9-3-203 - Non-methane hydrocarbons
  - R9-3-204 - Photochemical oxidants
  - R9-3-205 - Carbon monoxide
  - R9-3-206 - Nitrogen dioxide
  - R9-3-217 - Attainment areas; classification and standards
  - R9-3-301 - Installation permits
  - R9-3-305 - Qir quality impact analysis and monitoring requirements
  - R9-3-306 - Operating permits
  - R9-3-307 - Replacement
  - ~~R9-3-309 - Finding of no violation~~
  - R9-3-313 - Existing source emission monitoring
  - R9-3-401 - General
  - R9-3-405 - Roadways and streets
  - R9-3-408 - Mineral tailings
  - R9-3-501 - Visible emissions: general
  - R9-3-502 - Unclassified sources
  - R9-3-503 - Standards of performance for existing fossil-fuel  
fired steam generators and general fuel burning equipment
  - R9-3-504 - Standards of performance for incinerators
  - R9-3-508 - Standards of performance for existing asphalt concrete plants
  - R9-3-510 - Standards of performance for existing storage vessels for  
petroleum liquids
  - R9-3-511 - Standards of performance for existing secondary lead smelters
  - R9-3-512 - Standards of performance for existing secondary brass and  
bronze ingot production plants
  - R9-3-513 - Standards of performance for existing iron and steel plants
  - R9-3-514 - Standards of performance for existing sewage treatment plants
  - ~~R9-3-515 - Standards of performance for existing primary copper smelters~~
  - R9-3-516 - Standards of performance for existing coal preparation plants
  - R9-3-517 - Standards of performance for steel plants: existing electric arc  
furnaces (EAF)
  - R9-3-518 - Standards of performance for existing kraft pulp mills
  - R9-3-520 - Standards of performance for existing lime manufacturing plants
  - R9-3-521 - Standards of performance for existing non-ferrous metals industry  
sources
  - R9-3-602 - Off-road machinery
  - R9-3-801 - General

- Adopt:

- R9-3-207 - Lead
- R9-3-302 - Installation permits in nonattainment areas
- R9-3-303 - Offset standards
- R9-3-304 - Installation permits in attainment areas
- Appendix 1 - Filing instructions for installation permit Application
- Appendix 2 - Filing instructions for Operating Permit Application

Repeal:

- R9-3-302 - Installation permits in nonattainment areas
- R9-3-303 - Offset Standards
- R9-3-304 - Installation permits in attainment areas
- Appendix 1 - Filing Instructions for installation permit application
- Appendix 2 - Filing instructions for operating permit application

## DIRECTOR OF THE DEPARTMENT OF HEALTH SERVICES

## Order of Adoption

Pursuant to the A.R.S. § 36-1707, as amended Laws 1973, the Director of the Department of Health Services adopts a rule similar in substance, terms and conditions to the wording of the following:

1 Part 1. Section R9-3-101, Definitions, is amended to read as follows:

2 1 - 4. No change.

3 5. "Air pollution control equipment" means equipment used to eliminate,  
4 reduce or control the discharge emission of air ~~contaminants~~ pollutants into  
5 the ambient air.

6 6. No change.

7 7. "Allowable emissions" means the most stringent of the following:

8 a. The applicable new source performance standards or existing source  
9 performance standards, or

10 b. The emission rate agreed to by the ~~source~~ owner or operator of a source  
11 as a permit condition. Allowable emissions shall be calculated at the source's  
12 maximum rated capacity, unless the source is subject to enforceable permit con-  
13 ditions which limit rate of operation, hours of operation, or the type or amount  
14 of materials combusted or processed.

15 8 - 14. No change.

16 15. "Attainment area" means an area so designated by the Administrator  
17 acting pursuant to Section 107 of the Act as having ambient air pollutant  
18 concentration equal to or less than national primary or secondary ambient air  
19 quality standards for a particular pollutant or pollutants.

20 16. "Best available control technology" (BACT) means an emission limita-  
21 tion based on the maximum reduction of a pollutant subject to these Rules and  
22 Regulations which the Director, on a case-by-case basis, taking into account energy,  
23 environmental and economic impact and other costs, determines is achievable for

1 a major source or facility. If, due to technological or economic limitations on  
2 the application of measurement methodology, no emission limit is feasible, the  
3 application of BACT can require compliance with design, equipment, work practice  
4 or operational standards or any combination thereof. The degree of emission  
5 limitation necessary to ~~constitute~~ achieve BACT shall not be affected in any  
6 manner either by so much of the stack height of any source as exceeds allowable  
7 design criteria or any other dispersion technique. The preceding sentence shall  
8 not apply with respect to stack heights in ~~existence~~ existence before the date  
9 of enactment of the Clean Air Act Amendments of 1970 or dispersion techniques  
10 implemented before such date. For purposes of BACT allowable design criteria  
11 means the stack height necessary to insure that emissions from the stack do not  
12 result in excessive concentrations of any air pollutant in the immediate vicinity  
13 of the source as a result of atmospheric downwash, eddies and wakes which may be  
14 created by the source itself, nearby structures or nearby terrain obstacles (as  
15 determined by the Director). Such height shall not exceed two and a half times  
16 the height of such source unless the owner of the source demonstrates, after  
17 notice and opportunity for public hearing, to the satisfaction of the Director,  
18 that a greater height is necessary for the reason(s) cited in the preceding sen-  
19- tence. For purposes of BACT, the term "dispersion technique" includes any inter-  
20 mittent or supplemental control of air pollutants varying with atmospheric con-  
21 ditions. In no event shall application of BACT result in emissions of any pol-  
22 lutant, which will exceed the emissions allowed by any applicable new source  
23 performance standard.

24 17 - 26. No change.

25 27. "Commenced" means that an owner or operator has either:

26 a. Begun, or caused to begin, a continuous program of physical on-site

1 construction of the source or facility, or

2 b. Entered into binding agreements or contractual obligations which  
3 cannot be cancelled or modified without substantial loss to the owner or  
4 operator, to undertake a program of construction of the source or facility to  
5 be completed within a reasonable time.

6 28 - 41. No change.

7 42. "Discharge" means the release, or escape or emission from the source  
8 of an effluent into the atmosphere.

9 43 - 45. No change.

10 46. "Emission" means an air contaminant or gas stream or the act of passing  
11 ~~into-the-atmosphere~~ discharging an air contaminant or a gas stream, visible or  
12 invisible.

13 47. Delete.

14 48 - 49. Renumber as 47 - 48.

15 50. Renumber as 49. "Excess emissions" or "Emissions in excess of an  
16 emission limitation" means emissions of an air pollutant in excess of an emis-  
17 sion standard as measured by the compliance test method applicable to such  
18 emission standard.

19 51. Renumber as 50.

20 52. Renumber as 51. "Existing source performance standards" means emis-  
21 sion ~~limitations-or-other-performance-requirements-for-stationary-sources,-the~~  
22 ~~replacement,-erection,-installation-or-major-alteration-of-which-is-commenced~~  
23 ~~prior-to-the-effective-date-of-the-regulations-as-prescribed-by-Article-5-of-this~~  
24 ~~chapter-(existing-stationary-point-source-performance-standards)~~ standards appli-  
25 cable to existing sources.

26 53 - 55. Renumber as 52 - 54.

1        56. Renumber as 55. "Fugitive dust" means naturally occurring particles  
2        uncontaminated by pollutants resulting from industrial activity. Fugitive dust  
3        may include emissions from unpaved roads, paved roads, tilled farm land, exposed  
4        surface areas, arid lands, sparsely vegetated lands, unimproved lands, land  
5        reclamation, construction sites, mining activities associated with overburden  
6        removal, blasting, haul road truck transport and native soil or overburden  
7        material which becomes airborne naturally or from any other source.

8        57 - 59. Renumber as 56 - 58.

9        60. Delete.

10       61 - 73. Renumber as 59 - 71.

11       74. Renumber as 72. "Lowest achievable emission rate" (LAER) means an  
12       emission limitation based on the maximum reduction of a pollutant subject to  
13       these Rules and Regulations which the Director, ~~on-a-case-by-case-basis,-taking~~  
14       ~~into-account-energy,-environmental-and-economic-impact-and-other-costs,~~ consis-  
15       tent with the requirements of A.R.S. § 36-1707.A., determines is achievable for  
16       a major source or facility. If, due to technological or economic limitations  
17       on the application of measurement methodology, no emission limit is feasible,  
18       the application of LAER can require compliance with design, equipment, work  
19       practice or operational standards or any combination thereof. The degree of  
20       emission limitation necessary to ~~constitute~~ achieve LAER shall not be affected  
21       in any manner either by so much of the stack height of any major source as  
22       exceeds allowable design criteria or any other dispersion technique. The pre-  
23       ceding sentence shall not apply with respect to stack heights in ~~existanee~~  
24       existence before the date of enactment of the Clean Air Amendments of 1970 or  
25       dispersion techniques implemented before such date. For purpose of LAER allow-  
26       able design criteria means the stack height necessary to insure that emissions

1 from the stack do not result in excessive concentration of any air pollutant in  
2 the immediate vicinity of the major source as a result of atmospheric downwash,  
3 eddies and wakes which may be created by the major source itself, nearby struc-  
4 tures or nearby terrain obstacles (as determined by the Director). Such height  
5 shall not exceed two and half times the height of such major source unless the  
6 owner of the major source demonstrates, after notice and opportunity for public  
7 hearing, to the satisfaction of the Director, that a greater height is necessary  
8 for the reason(s) cited in the preceding sentence. For purpose of LAER, the  
9 term "dispersion technique" includes any intermittent or supplemental control  
10 of air pollutants varying with atmospheric conditions. In no event shall appli-  
11 cation of LAER result in emissions of any pollutant, which will exceed the emis-  
12 sions allowed by the ~~more~~ most stringent of the following:

- 13 a. New source performance standards, or
- 14 b. Existing source performance standards, or
- 15 c. The most stringent emissions limitation contained in a state implementa-  
16 tion plan adopted pursuant to Section 110 of the Act, ~~which has been adequately~~  
17 ~~demonstrated in practice~~ for such class or category of sources, ~~or facilities~~  
18 unless such limitation is demonstrated to be unachievable.
- 19 d. The most stringent emission limitation achieved in practice by such  
20 class or category of source.

21 For purposes of this definition sources shall be considered to be in the  
22 same class or category if it is feasible to transfer the pollution-control tech-  
23 nology required to achieve a particular emission limitation from one type of  
24 source to another.

25 75. Renumber as 73. Delete the entire definition and replace as follows:  
26 "Major alteration" means any physical change in, or change in the method of



1 operation of, a facility or the construction of a new facility within a major  
2 source which increases the potential emission rate of any air pollutant to which  
3 a standard under these Rules and Regulations applies by either one hundred (100)  
4 or two hundred and fifty (250) tons per year or more, whichever is applicable.

5 a. The one hundred (100) tons per year limitation for any particular  
6 pollutant shall be applicable:

7 i. Regardless of geographical location of the sources and regardless of  
8 the geographical area affected by the emissions of that pollutant, to the  
9 following sources: Fossil fuel-fired steam electric plants of more than 250  
10 million British thermal units per hour heat input, coal cleaning plants (with  
11 thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters,  
12 iron and steel mill plants, primary aluminum ore reduction plants, primary copper  
13 smelters, municipal incinerators capable of charging more than 250 tons of refuse  
14 per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries,  
15 lime plants, phosphate rock processing plants, coke oven batteries, sulfur  
16 recovery plants, carbon black plants (furnace process), primary lead smelters,  
17 fuel conversion plants, sintering plants, secondary metal production plants,  
18 chemical process plants, fossil fuel boilers (or combination thereof) totaling  
19 more than 250 million British thermal units per hour heat input, petroleum  
20 storage and transfer units with a total storage capacity exceeding 300 thousand  
21 barrels, taconite ore processing plants, glass fiber processing plants, and  
22 charcoal production plants, and

23 ii. To sources which will be located in a nonattainment area for such  
24 pollutant.

25 b. The two hundred and fifty (250) tons per year limitation for any parti-  
26 cular pollutant shall be applicable to sources under all conditions not enumerated

1 in subparagraph a. above.

2 c. The owner or operator of a source or facility (other than facilities  
3 enumerated in a(i) above) undergoing an alteration which it contends is not a  
4 major alteration but which will result in the potential emission rate of such  
5 source or facility being increased by more than 100 tons per year but less than  
6 250 tons per year shall be required to demonstrate to the Director that subpara-  
7 graph a. is not applicable to such source or facility.

8 d. Routine maintenance, repair and replacement shall not be considered a  
9 physical change.

10 e. The following shall not be considered a change in the method of opera-  
11 tion, unless previously limited by enforceable permit conditions:

12 i. An increase in production rate, if such increase does not exceed the  
13 operating design capacity of the affected facility;

14 ii. An increase in the hours of operation, subject to conditions contained  
15 in the source's operating permit;

16 iii. Use of an alternative fuel or raw material by reason of any order in  
17 effect under Section 2(a) and (b) of the Energy Supply and Environmental Coordi-  
18 nation Act of 1974 (15 U.S.C.A. § 792 or any superseding legislation), or by  
19 reason of a natural gas curtailment plan in effect pursuant to the Federal Power  
20 Act (U.S.C.A. Title 16, Chapter 12), or by reason of any other forced curtail-  
21 ment or lack of supply of natural gas if such source can furnish to the Depart-  
22 ment a certified copy of the finding of a state or federal governmental body  
23 having jurisdiction over such source that attests to the existence of a forced  
24 curtailment or lack of supply of natural gas.

25 iv. Use of an alternative fuel or raw material, if prior to January 6, 1975,  
26 the source or facility was capable of accommodating such fuel or material;

1        v. Use of an alternative fuel by reason of an order or rule under Section  
2        125 of the Act;

3        vi. Change in ownership of the affected facility.

4        vii. Installation of air pollution control equipment, and all related  
5        process equipment and materials necessary for its operation, undertaken for  
6        the purpose of complying with any emission standards.

7        76. Renumber as 74. "Major source" means a source which has the potential  
8        to emit ~~more than~~ 100 or 250 tons per year or more of any pollutant subject to  
9        this Chapter, whichever is applicable.

10       a. The one hundred (100) tons per year or more limitation for any parti-  
11       cular pollutant shall be applicable:

12       i. Regardless of geographical location of the source and regardless of the  
13       geographical area affected by the source's emissions of that pollutant, to  
14       the following sources: Fossil fuel-fired steam electric plants of more than  
15       250 million British thermal units per hour heat input, coal cleaning plants  
16       (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc  
17       smelters, iron and steel mill plants, primary aluminum ore reduction plants,  
18       primary copper smelters, municipal incinerators capable of charging more than  
19       250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants,  
20       petroleum refineries, lime plants, phosphate rock processing plants, coke oven  
21       batteries, sulfur recovery plants, carbon black plants (furnace process), pri-  
22       mary lead smelters, fuel conversion plants, sintering plants, secondary metal  
23       production plants, chemical process plants, fossil fuel boilers (or combinations  
24       thereof) totaling more than 250 million British thermal units per hour heat  
25       input, petroleum storage and transfer units with a total storage capacity  
26       exceeding 300 thousand barrels, taconite ore processing plants, glass fiber

processing plants, and charcoal production plants, and

ii. To sources which will be located in a nonattainment area for such pollutant.

b. The two hundred and fifty (250) tons per year limitation for any particular pollutant shall be applicable to sources under all conditions not enumerated in subparagraph a. above.

c. The owner or operator of a source (other than sources enumerated in a(i) above) which it contends is not a major source but which has a potential emission rate of more than 100 tons per year but less than 250 tons per year shall be required to demonstrate to the Director that subparagraph a. is not applicable to such source.

77 - 80. Renumber as 75 - 78.

81. Delete.

82 - 83. Renumber as 79 - 80.

84. Renumber as 81. "New source" means any major source of air pollution ~~or potential source of air pollution~~, the construction of which was commenced after the effective date of these Rules and Regulations.

85. Renumber as 82. "New source performance standards" means the emission limitations or other performance requirements for major stationary sources, the construction or major alteration of which is commenced after the effective date of the regulations as prescribed by Article 8 of this Chapter (New source performance article).

86 - 92. Renumber as 83 - 89.

93. Renumber as 90. "Particulate matter" means for mass emissions testing, any finely divided liquid or solid material, other than sulfuric acid mist aerosols or uncombined water, as measured by the test methods and procedures

described in R9-3-310.

94 - 96. Renumber as 91 - 93.

97. Renumber as 94. "Photochemically reactive solvent" means a solvent with an aggregate ~~or~~ of more than twenty (20) percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

a. ~~A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation; five (5) percent;~~ A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent;

b. A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight (8) percent;

c. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichlorethylene or toluene: twenty (20) percent,

d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups or organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

98. Renumber as 95.

96. "Pollutant" means an air contaminant the emission or ambient concentration of which is regulated pursuant to these Rules and Regulations.

99. Renumber as 97. "Potential to emit" or "potential emission rate" means the capability to emit or rate at which a pollutant is emitted in the

1 absence of air pollution control equipment, unless such equipment is necessary  
2 for the source to produce its normal product or is integral to the normal  
3 operation of the source. Potential emission rates shall be determined at the  
4 source's maximum ~~annual~~ rated capacity or maximum demonstrated capacity, which-  
5 ever is larger, unless the source is subject to permit conditions limiting the  
6 rate of operation, hours of operation or the type or amount of material com-  
7 busted or processed.

8 100 - 102. Renumber as 98 - 100.

9 103. Renumber as 101. "Process weight rate" means a rate established as  
10 follows:

11 a. For continuous or long run, steady-state process sources, the total  
12 process weight for the entire period of continuous operation or for a typical  
13 portion thereof, divided by the number of hours of such period or portion thereof.

14 b. For cyclical or batch process sources, the total process weight for a  
15 period which covers a complete operation or an integral number of cycles, divided  
16 by the hours of actual process operation during such period.

17 c. The total process weight from all similar units employing a similar type  
18 process shall be used in determining the maximum allowable emission of particulate  
19 matter.

20 104. Renumber as 102.

21 103. "Reasonably available control technology" for facilities subject to  
22 an existing source performance standard equals the emissions limitation of the  
23 existing source performance standard.

24 104. "Reclaiming machinery" means any machine, equipment device or other  
25 article used for picking up stored granular material and depositing this material  
26 on a conveyor or reintroducing this material into the process.

105. No change.

106. "Reference method" means any the methods of sampling and analyzing for an air pollutant as described in the Arizona Testing Manual.

107 - 110. No change.

111. "Significance levels" means the following ambient concentrations for the enumerated pollutants:

<u>Pollutant</u>	<u>Averaging Time</u>				
	<u>Annual</u>	<u>24-Hour</u>	<u>8-Hour</u>	<u>3-Hour</u>	<u>1-Hour</u>
SO <sub>2</sub>	2 ug/m <sup>3</sup>	5 ug/m <sup>3</sup>		25 ug/m <sup>3</sup>	
TSP	5 ug/m <sup>3</sup>	10 ug/m <sup>3</sup>			
NO <sub>2</sub>	2 ug/m <sup>3</sup>				
CO			0.5 mg/m <sup>3</sup>		3 mg/m <sup>3</sup>

Except for the annual pollutant concentrations, exceedance of significance levels shall occur when the ambient concentrations of the above pollutants will be exceeded more than once per year at any one location. Significance levels shall be deemed not to have been exceeded for any of the above-enumerated pollutants if such concentrations occur at a specific location and at a time when Arizona ambient air quality standards for such pollutant would not be violated.

111 - 115. Renumber to 112 - 116.

116. Renumber to 117. "Source" means any equipment, machine, incinerator, structure, building, device or other article (or combination thereof) which is located on one or more contiguous properties and which is owned or operated by the same person (or by persons under common control) and which emits or may emit an air pollutant. Properties shall not be considered contiguous if they are connected only by property upon which is located equipment utilized solely

1 in transmission of electrical energy. The following are not considered sources  
2 for purposes of these regulations:

3 a. Motor vehicles.

4 b. Fuel burning equipment, which, in the aggregate with such other equip-  
5 ment of the applicant at the same location or property, is rated at less than  
6 500,000 Btu's per hour.

7 c. Agricultural vehicles or agricultural equipment used in normal farm  
8 operations.

9 117 - 120. Renumber to 118 - 121.

10 121. Renumber to 122. "Stationary source" means any structure, building,  
11 facility, equipment, installation or operation (or combination thereof) which is  
12 located on one or more contiguous or adjacent properties and which is owned or  
13 operated by the same person (or by persons under common control) and which emits  
14 or may emit an air pollutant. Properties shall not be considered contiguous if  
15 they are connected only by property upon which is located equipment utilized  
16 solely in transmission of electrical energy.

17 122 - 124. Renumber to 123 - 125.

18 126. "Unclassified area" means an area which the Administrator, because of  
19 a lack of adequate data, is unable to classify as an attainment or nonattainment  
20 area for a specific pollutant. For purposes of this chapter unclassified areas  
21 are to be treated as attainment areas.

22 127. "Uncombined water" means condensed water containing analytical trace  
23 amounts of other chemical elements or compounds.

24 125 - 129. Renumber to 128 - 132.

25 130. Renumber to 133. "Volatile organic compound" means any organic  
26 compound (except the compounds enumerated below) that, when released into the



1 atmosphere, can remain long enough to participate in photochemical reactions.  
2 Methane; Ethane; 1,1,1,-Trichloroethane (Methyl Chloroform); Trichlorotri-  
3 fluoroethane (Freon 113); and Methelene Chloride are not considered to be vola-  
4 tile organic compounds for purposes of regulation under this Chapter.

5 131. Renumber to 134.

6 Part 2. Section R9-3-201, Non-specific particulates, is amended to read  
7 as follows:

8 A. The maximum allowable annual geometric mean concentration for non-specific  
9 particulates shall be 75 micrograms per cubic meter.

10 B. No change.

11 C. Except as provided under Subsections D. and E. below, particulates con-  
12 centrations shall be measured by the reference method described in Appendix B  
13 to Title 40, Part 50 of the Code of Federal Regulations ~~{1977}~~, or by one of the  
14 following:

15 1. A method of measurement that has been designated, prior to the effective  
16 date of this regulation, as a reference or equivalent method by the Administrator  
17 acting pursuant to Title 40, Part 53 of the Code of Federal Regulations. ~~{1977}~~-

18 2. A method of measurement that, though not designated as a reference or  
19 equivalent method, has been approved for use prior to the effective date of this  
20 regulation by the Administrator acting pursuant to Title 40, Part 51, Section 51.17a  
21 of the Code of Federal Regulations. ~~{1977}~~- Such method shall be subject to any  
22 restrictions placed on its use by the Administrator.

23 D. The Director may approve additional methods of measurement upon a finding  
24 that:

25 1. The method of measurement proposed for use has been designated, subsequent  
26 to the effective date of this regulation, a reference or equivalent method by the

1 Administrator acting pursuant to Title 40, Part 53 of the Code of Federal  
2 Regulations.

3 2. The accuracy and other performance specifications of the method of  
4 measurement for which approval is sought make that method substantially equivalent  
5 or superior to methods previously approved for use.

1        E. The cancellation or supersession of designation of a reference or equivalent  
2 method, subsequent to the effective date of these regulations, by the Administrator  
3 acting pursuant to Title 40, Part 53, Sections 53.11 and 53.16 of the Code of  
4 Federal Regulations, shall also amount to a withdrawal of the authorization for  
5 use of that method for purposes of this regulation. However, such withdrawal of  
6 the authorization shall not become effective until the Director has determined that  
7 such withdrawal was supported by sufficient evidence and has specified a period of  
8 not less than nine (9) months in which existing, non-approved analyzers may be  
9 replaced.

10  
11  
12        Part 3. Section R9-3-202, Sulfur dioxide, is amended to read as follows:

13        A. The maximum allowable annual arithmetic mean concentration shall be 80  
14 micrograms per cubic meter.

15        B. No change

16        C. No change

17        D. Except as provided under Subsections E. and F. below, sulfur dioxide  
18 concentrations shall be measured by the reference method described in Appendix A  
19 to Title 40, Part 50 of the Code of Federal Regulations (~~1977~~), or by one of the  
20 following:

21        1. A method of measurement that has been designated, prior to the effective  
22 date of this regulation, as a reference or equivalent method by the Administrator  
23 acting pursuant to Title 40, Part 53 of the Code of Federal Regulations.

24        2. A method of measurement that, though not designated as a reference or  
25 equivalent method, has been approved for use prior to the effective date of this  
26 regulation by the Administrator acting pursuant to Title 40, Part 51, Section

1 51.17a of the Code of Federal Regulations (~~1977~~). Such method shall be subject  
2 to any restrictions placed on its use by the Administrator.

3 E. 3. An analyzer not approvable under D.1. or D.2. above which was pur-  
4 chased prior to February 18, 1976 may be used through February 18, 1980.

5 E. The Director may approve additional methods of measurement upon a  
6 finding that:

7 1. The method of measurement proposed for use has been designated, subse-  
8 quent to the effective date of this regulation, a reference or equivalent method  
9 by the Administrator acting pursuant to Title 40, Part 53 of the Code of Federal  
10 Regulations.

11 2. The accuracy and other performance specifications of the method of  
12 measurement for which approval is sought make that method substantially equiva-  
13 lent or superior to methods previously approved for use.

14 F. The cancellation or supersession of designation of a reference or  
15 equivalent method, subsequent to the effective date of these regulations, by  
16 the Administrator acting pursuant to Title 40, Part 53, Sections 53.11 and 53.16  
17 of the Code of Federal Regulations, shall also amount to a withdrawal of author-  
18 ization for use of that method for purposes of this regulation. However, such  
19 withdrawal of authorization shall not become effective until the Director has  
20 determined that such withdrawal was supported by sufficient evidence and has  
21 specified a period of not less than nine (9) months in which existing, non-approved  
22 analyzers may be replaced.

23  
24  
25 Part 4. Section R9-3-203, Non-methane hydrocarbons, is amended to read as  
26 follows:

1       A. For purposes of these Rules and Regulations, the non-methane hydro-  
2 carbons standard is for use only as a guide to assist the state for purposes  
3 of achieving the Arizona ambient air standards for photochemical oxidants con-  
4 tained in Section R9-3-204. The maximum allowable average 3-hour concentration  
5 (6 to 9 a.m.) for non-methane hydrocarbons shall be 160 micrograms per cubic  
6 meter. This concentration shall not be exceeded more than once per year at  
7 any one location.

8       B. Except as provided under Subsections C. and D. below, non-methane  
9 hydrocarbons concentrations shall be measured by the reference method described  
10 in Appendix E to Title 40, Part 50 of the Code of Federal Regulations (1977),  
11 or by one of the following:

12       1. A method of measurement that has been designated, prior to the effec-  
13 tive date of this regulation, as a reference or equivalent method by the  
14 Administrator acting pursuant to Title 40, Part 53 of the Code of Federal  
15 Regulations (1977).

16       2. A method of measurement that, though not designated as a reference or  
17 equivalent method, has been approved for use prior to the effective date of  
18 this regulation, by the Administrator acting pursuant to Title 40, Part 51,  
19 Section 51.17a of the Code of Federal Regulations (1977). Such method shall  
20 be subject to any restrictions placed on its use by the Administrator.

21       C. The Director may approve additional methods of measurement upon a  
22 finding that:

23       1. The method of measurement proposed for use has been designated, subse-  
24 quent to the effective date of this regulation, a reference or equivalent  
25 method by the Administrator acting pursuant to Title 40, Part 53 of the Code  
26 of Federal Regulations.

1        2. The accuracy and other performance specifications of the method of  
2        measurement for which approval is sought make that method substantially equiva-  
3        lent or superior to methods previously approved for use.

4        D. The cancellation or supersession of designation of a reference or  
5        equivalent method, subsequent to the effective date of these regulations, by  
6        the Administrator acting pursuant to Title 40, Part 53, Sections 53.11 and  
7        53.16 of the Code of Federal Regulations, shall also amount to a withdrawal  
8        of authorization for use of that method for purposes of this regulation. How-  
9        ever, such withdrawal of authorization shall not become effective until the  
10       Director has determined that such withdrawal was supported by sufficient evidence  
11       and has specified a period of not less than nine (9) months in which existing,  
12       non-approved analyzers may be replaced.

13  
14  
15       Part 5. Section R9-3-204, Photochemical oxidants, is amended to read as  
16       follows:

17       A. No change.

18       B. Except as provided under Subsections C. and D. below, photochemical  
19       oxidants concentrations shall be measured by the reference method described in  
20       Appendix D to Title 40, Part 50 of the Code of Federal Regulations {1977}, or  
21       by one of the following:

22       1. A method of measurement that has been designated, prior to the effec-  
23       tive date of this regulation, as a reference or equivalent method by the  
24       Administrator acting pursuant to Title 40, Part 53 of the Code of Federal  
25       Regulations {1977}.

26       2. A method of measurement that, though not designated as a reference or

1 equivalent method, has been approved for use prior to the effective date of this  
2 regulation, by the Administrator acting pursuant to Title 40, Part 51, Section  
3 51.17a of the Code of Federal Regulations (~~1977~~). Such method shall be subject  
4 to any restrictions placed on its use by the Administrator.

5 3. An analyzer not approvable under B.1. or B.2. above which was purchased  
6 prior to February 18, 1976 may be used through February 18, 1980.

7 C. The Director may approve additional methods of measurement upon a  
8 finding that:

9 1. The method of measurement proposed for use has been designated, subse-  
10 quent to the effective date of the regulation, a reference or equivalent method  
11 by the Administrator acting pursuant to Title 40, Part 53 of the Code of Federal  
12 Regulations.

13 2. The accuracy and other performance specifications of the method of  
14 measurement for which approval is sought make that method substantially equiva-  
15 lent or superior to methods previously approved for use.

16 D. The cancellation or supersession of designation of a reference or  
17 equivalent method, subsequent to the effective date of these regulations, by  
18 the Administrator acting pursuant to Title 40, Part 53, Sections 53.11 and  
19 53.16 of the Code of Federal Regulations, shall also amount to a withdrawal of  
20 authorization for use of that method for purposes of this regulation. However,  
21 such withdrawal of authorization shall not become effective until the Director  
22 has determined that such withdrawal was supported by sufficient evidence and  
23 has specified a period of not less than nine (9) months in which existing, non-  
24 approved analyzers may be replaced.

25  
26 Part 6. Section R9-3-205, Carbon monoxide, is amended to read as follows:

1 A. No change.

2 B. No change.

3 C. Except as provided under Subsections D. and E. below, carbon monoxide  
4 concentrations shall be measured by the reference method described in Appendix C  
5 to Title 40, Part 50 of the Code of Federal Regulations {1977}, or by one of  
6 the following:

7 1. A method of measurement that has been designated, prior to the effec-  
8 tive date of this regulation, as a reference or equivalent method by the  
9 Administrator acting pursuant to Title 40, Part 53 of the Code of Federal  
10 Regulations {1977}.

11 2. A method of measurement that, though not designated as a reference or  
12 equivalent method, has been approved for use prior to the effective date of  
13 this regulation, by the Administrator acting pursuant to Title 40, Part 51,  
14 Section 51.17a of the Code of Federal Regulations. Such method shall be  
15 subject to any restrictions placed on its use by the Administrator.

16 3. An analyzer not approvable under C.1. or C.2. above which was purchased  
17 prior to February 18, 1976 may be used through February 18, 1980.

18 D. The Director may approve additional methods of measurement upon a  
19 finding that:

20 1. The method of measurement proposed for use has been designated, subse-  
21 quent to the effective date of this regulation, a reference or equivalent  
22 method by the Administrator acting pursuant to Title 40, Part 53 of the Code  
23 of Federal Regulations.

24 2. The accuracy and other performance specifications of the method of  
25 measurement for which approval is sought make that method substantially equiva-  
26 lent or superior to methods previously approved for use.



1        E. The cancellation or supersession of designation of a reference or  
2 equivalent method, subsequent to the effective date of these regulations, by  
3 the Administrator acting pursuant to Title 40, Part 53, Sections 53.11 and  
4 53.16 of the Code of Federal Regulations, shall also amount to a withdrawal  
5 of authorization for use of that method for purposes of this regulation. How-  
6 ever, such withdrawal of authorization shall not become effective until the  
7 Director has determined that such withdrawal was supported by sufficient evi-  
8 dence and has specified a period of not less than nine (9) months in which  
9 existing, non-approved analyzers may be replaced.

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11  
12        Part 7. Section R9-3-206, Nitrogen dioxide, is amended to read as follows:

13        A. The maximum allowable annual arithmetic mean concentration for nitrogen  
14 dioxide shall be 100 micrograms per cubic meter.

15        B. Except as provided under Subsections C. and D. below, nitrogen dioxide  
16 concentrations shall be measured by the reference method described in Appendix F  
17 to Title 40, Part 50 of the Code of Federal Regulations {1977}, or by one of  
18 the following:

19        1. A method of measurement that has been designated, prior to the effective  
20 date of this regulation, as a reference or equivalent method by the Administrator  
21 acting pursuant to Title 40, Part 53 of the Code of Federal Regulations {1977}.

22        2. A method of measurement that, though not designated as a reference or  
23 equivalent method, has been approved for use prior to the effective date of  
24 this regulation, by the Administrator acting pursuant to Title 40, Section 51.17a  
25 of the Code of Federal Regulations {1977}. Such method shall be subject to any  
26 restrictions placed on its use by the Administrator.

1       3. An analyzer not approvable under 8.1. or 8.2. which was purchased  
2 prior to January 3, 1978 may be used through January 3, 1980.

3       C. The Director may approve additional methods of measurement upon a  
4 finding that:

5       1. The method of measurement proposed for use has been designated, subse-  
6 quent to the effective date of this regulation, a reference or equivalent  
7 method by the Administrator acting pursuant to Title 40, Part 53 of the Code  
8 of Federal Regulations.

9       2. The accuracy and other performance specifications of the method of  
10 measurement for which approval is sought make that method substantially equiva-  
11 lent or superior to methods previously approved for use.

12       D. The cancellation or supersession of designation of a reference or  
13 equivalent method, subsequent to the effective date of these regulations, by  
14 the Administrator of the Environmental Protection Agency acting pursuant to  
15 Title 40, Part 53, Sections 53.11 and 53.16 of the Code of Federal Regulations,  
16 shall also amount to a withdrawal of authorization for use of that method for  
17 purposes of this regulation. However, such withdrawal of authorization shall  
18 not become effective until the Director has determined that such withdrawal was  
19 supported by sufficient evidence and has specified a period of not less than  
20 nine (9) months in which existing, non-approved analyzers may be replaced.

21  
22  
23       Part 8. A new section R9-3-207 is adopted to read as follows:  
24 R9-3-207. Reserved. Lead.

25       A. The maximum allowable lead concentration shall be 1.5 micrograms per  
26 cubic meter, arithmetic mean as averaged over a calendar quarter.

1       B. Lead concentrations shall be measured by the reference method described  
2 in Appendix G, a new appendix to Part 50 of the Code of Federal Regulations  
3 published in the Federal Register, Volume 43, No. 194, October 5, 1978,  
4 pages 46246-46277, or by one of the following:

5       1. A method of measurement that has been designated prior to the effec-  
6 tive date of this regulation, as a reference or equivalent method by the Adminis-  
7 trator acting pursuant to Title 40, Part 53 of the Code of Federal Regulations.

8       2. A method of measurement that, though not designated as a reference or  
9 equivalent method, has been approved for use prior to the effective date of  
10 this Regulation, by the Administrator acting pursuant to Title 40, Part 51,  
11 Section 51.17a of the Code of Federal Regulations. Such method shall be sub-  
12 ject to any restrictions placed on its use by the Administrator.

13       C. The Director may approve additional methods of measurement upon a  
14 finding that:

15       1. The method of measurement proposed for use has been designated, subse-  
16 quent to the effective date of this regulation, a reference or equivalent method  
17 by the Administrator acting pursuant to Title 40, Part 53 of the Code of  
18 Federal Regulations.

19       2. The accuracy and other performance specifications of the method of  
20 measurement for which approval is sought make that method substantially equiva-  
21 lent or superior to methods previously approved for use.

22       D. The cancellation or supersession of designation of a reference or  
23 equivalent method, subsequent to the effective date of these regulations, by  
24 the Administrator acting pursuant to Title 40, Part 53, Sections 53.11 and  
25 53.16 of the Code of Federal Regulations, shall also amount to a withdrawal of  
26 authorization for use of that method for purposes of this regulation.

1 However, such withdrawal of authorization shall not become effective until the  
2 Director has determined that such withdrawal was supported by sufficient evi-  
3 dence and has specified a period of not less than nine (9) months in which  
4 existing, non-approved analyzers may be replaced.  
5  
6

7 Part 9. Section R9-3-217 is amended to read as follows:

8 R9-3-217. Attainment areas; classification and standards.

9 A. No change.

10 B. Limitation of pollutants in classified attainment areas.

11 1. No change.

12 2. The maximum allowable concentration of any air pollutant in any area  
13 to which the preceding paragraph applies shall not exceed a concentration for  
14 each pollutant ~~or exposure~~ equal to the concentration permitted under the  
15 Arizona State Ambient Air Quality Standards contained in this Article (Article 2.)

16 3. Exceptions to be considered:

17 a. For purposes of determining compliance with the maximum allowable  
18 increases in ambient concentrations of an air pollutant, the following concen-  
19 trations of such pollutant shall not be taken into account:

20 i. Concentration of such pollutant attributable to the increase in emis-  
21 sions from major and stationary sources which have converted from the use of  
22 petroleum products, or natural gas, or both, by reason of natural gas curtail-  
23 ment order which is in effect under the provisions of Sections 2(a) and (b) of  
24 the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C.A.  
25 § 792) (or any subsequent legislation which supersedes such provisions) over  
26 the emissions from such sources before the effective date of such order; or

1 the concentration of such pollutant attributable to the increase in emissions  
2 from major and stationary sources which have converted from using natural gas  
3 by reason of any other forced curtailment or lack of supply of natural gas over  
4 the emissions from such sources before the effective date of such conversion if  
5 such source can furnish to the Department a certified copy of the finding of a  
6 State or Federal governmental body having jurisdiction over such source that  
7 attests to the existence of a forced curtailment or lack of supply of natural  
8 gas.

9 ii. The concentration of such pollutant attributable to the increase  
10 in emissions from major and stationary sources which have converted from using  
11 gas by reason of a natural gas curtailment plan in effect pursuant to the  
12 Federal Power Act (U.S.C.A., Title 16, Chapter 12) over the emissions from  
13 such sources before the effective date of such plan;

14 iii. Concentrations of particulate matter attributable to the increase  
15 in emissions from construction or other temporary activities; and

16 iv. The increase in concentrations attributable to new sources outside  
17 the United States over the concentrations attributable to existing sources which  
18 are included in the baseline concentration.

19 b. No action taken with respect to a source under Paragraph 3. (a) (i)  
20 or (ii) shall apply more than five years after the effective date of the order  
21 or plan referred to.

22 4. For the purposes of this section, "Baseline concentration" means,  
23 with respect to a particular pollutant, the ambient concentration levels of  
24 that pollutant which exist at the time of the first application for an instal-  
25 lation permit issued pursuant to R9-3-304 in an attainment area, based on  
26 State air quality data and on such monitoring data as the permit applicant

1 is required to submit. Such ambient concentration levels shall take into  
2 account all projected emissions in, or which may affect, such area from any  
3 major source on which construction or a major alteration commenced prior to  
4 January 6, 1975, but which has not begun operation by the date of the baseline  
5 air quality concentration determination. Emissions of sulfur dioxide and  
6 particulate matter from any major source or as the result of any major altera-  
7 tion on which construction commenced after January 6, 1975, shall not be  
8 included in the baseline and shall be counted against the maximum allowable  
9 increases in pollutant concentration established under this section.

1 Part 10. Section R9-3-301., Installation permits, is amended to read as  
2 follows:

3 R9-3-301. Installation permits: General

4 A. No person shall commence construction of a new major source or a major  
5 alteration of a ~~major source or equipment, machinery, incinerator, device or~~  
6 ~~other article which may eliminate, reduce or control the emission of air pollu-~~  
7 ~~tants~~ or of air pollution control equipment without first obtaining an instal-  
8 lation permit from the Director. The requirements of Sections R9-3-301. through  
9 R9-3-305. shall apply only to the new major source to be constructed or to the  
10 facilities undergoing major alteration and only with respect to pollutants for  
11 which such source is classified as a major source or the alteration to the  
12 facility is classified as a major alteration and shall not apply to any other  
13 facilities within the major source or to any other pollutants emitted by such  
14 facilities or by the major source.

15 B. There shall be two classes of installation permits:

16 1. Class A permits shall be issued to persons proposing to commence con-  
17 struction of a new major source or a major alteration ~~of a major~~ to a source.

18 2. Class B permits shall be issued to persons proposing solely to  
19 commence construction or an alteration of any air pollution control equipment.  
20 ~~machine, incinerator, device or other article, the use of which may eliminate,~~  
21 ~~reduce or control the emission of air pollutants.~~

22 C. No Class A installation permit shall be issued to a person unless that  
23 person can demonstrate to the Director that: the source for which the permit is  
24 sought.

25 1. ~~Will not emit any air pollutants in amounts which will:~~

26 a. ~~Prevent attainment or maintenance by any other state of any national~~

1 primary or secondary ambient air quality standard.

2 b. -- Interfere with a plan by any other state for the prevention of  
3 significant deterioration as provided for under the Act.

4 1. The increase in the amount of emission of any pollutant for which the  
5 source is classified as a major source caused by the operation or major altera-  
6 tion for which the permit is sought will not result in exceedances of the  
7 significance levels for that pollutant in any area of another state in which  
8 either:

9 a. Any national primary or secondary ambient air quality standard is  
10 violated, or,

11 b. Any prevention of significant deterioration pollutant increment in  
12 classified attainment areas is violated.

13 2. -- For any source constructing or making a major alteration to a major  
14 source in an attainment area for any pollutant(s), the source will be in  
15 compliance with all provisions of R9-3-304. -- (PSD section) with regard to such  
16 pollutant(s).

17 2. The person complied with all applicable provisions of Sections R9-3-302.  
18 through R9-3-305.

19 3. -- For any source constructing or making a major alteration to a major  
20 source in a nonattainment area for any pollutant(s), the source will be in  
21 compliance with all provisions of R9-3-302. -- (nonattainment section) with  
22 regard to such pollutant(s).

23 3. The source will not exceed the applicable standards for hazardous air  
24 pollutants contained in Article 9. (hazardous air pollutant standards article).

25 4. -- Will not exceed the applicable standards for hazardous air pollutants  
26 contained in Article 9. -- (hazardous air pollutant standards article).



1        4. The source will not exceed the limitations, if applicable, on emissions  
2 from non-point sources contained in Article 4.

3        ~~5. --Will not exceed the limitations, if applicable, on emissions from~~  
4 ~~non-point sources contained in Article 4.~~

5        D. No change.

6        E. No class A installation permit shall be issued ~~for the construction or~~  
7 ~~major alteration of a major source subject to the requirements of R9-3-304.~~  
8 ~~(PSD section) which may significantly contribute to levels of air pollution in~~  
9 ~~excess of the national ambient air quality standards in any air quality control~~  
10 ~~region outside the State unless the person applying for such permit provides~~  
11 ~~written notice of the permit application to the agency having cognizance over~~  
12 ~~major source construction permits in all nearby states the air pollution levels~~  
13 ~~of which may be affected by such source above the following levels.~~

<u>Pollutant</u>	<u>Averaging Time</u>			
	<u>Annual</u>	<u>24-Hour</u>	<u>8-Hour</u>	<u>1-Hour</u>
SO <sub>2</sub>	2 ug/m <sup>3</sup>	5 ug/m <sup>3</sup>		
TSP	5 ug/m <sup>3</sup>	10 ug/m <sup>3</sup>		
NO <sub>2</sub>	1 ug/m <sup>3</sup>			
CO			0.5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

20        Such notice shall be ~~communicated at least 60 days prior to the date on which~~  
21 ~~commencement of the erection, installation, replacement or major alteration is~~  
22 ~~to be permitted~~ mailed by the applicant contemporaneously with the filing of  
23 the application for a Class A installation permit.

24        F. The requirements of Sections R9-3-302. through R9-3-305. shall not  
25 apply to a major alternation to a source that is not a replacement under R9-3-307.  
26 nor the addition of a new facility, if the person applying for an installation

1 permit can demonstrate to the Director that no net increase in emissions will  
2 occur at the source, taking into account all emissions increases and decreases  
3 at the source which would accompany the major alteration.

4 G. Except for assessing air quality impacts within Class I areas, the  
5 air impact analysis required to be conducted in connection with the filing  
6 for a Class A installation permit shall initially consider only the geographical  
7 area located within a fifty (50) kilometer radius from the new major source or  
8 major alteration's point of greatest emissions. The Director (on his own  
9 initiative or upon receipt of written notice from any person) shall have the  
10 right at anytime to request an enlargement of the geographical area for which  
11 an air quality impact analysis is to be performed by giving the person applying  
12 for the installation permit written notice thereof, specifying the enlarged  
13 radius to be so considered. In performing an air impact analysis for any  
14 geographical area over fifty (50) kilometers, the person applying for the  
15 installation permit may use monitoring or modeling data obtained from major  
16 sources having comparable emissions or having emissions which are capable of  
17 being accurately used in such demonstration, and which are subjected to terrain  
18 and atmospheric stability conditions which are comparable or which may be  
19 extrapolated with reasonable accuracy for use in such demonstration.

20 F. H. The application for a Class B installation permit shall be made on  
21 forms prescribed by the Director, and shall be signed by the applicant. An  
22 application shall contain, at a minimum, the information required by Appendix 1.

23 I. Upon receipt of an application, the Director shall make a preliminary  
24 determination whether the permit should be approved or disapproved and whether,  
25 if approved, conditions should be attached to such approval.

26 G. J. The Director shall make available in at least one location in each air

1 quality control region in which the proposed major source or major alteration  
2 would be constructed, a copy of all materials submitted with an application for  
3 a Class A installation permit, a copy of the preliminary determination, a brief  
4 summary of the basis for the preliminary determination, and, to the maximum  
5 extent practicable, a copy or summary of all other materials to be considered in  
6 making a final determination on the application.

7 H- K. The Director shall notify the public within five days of receipt of  
8 an application for a Class A installation permit, by advertisement in a newspaper  
9 of general circulation in each air quality control region in which the proposed  
10 major source or major alteration would be constructed, of the application. Such  
11 notification shall include a summary of the application, the Director's preliminary  
12 determination, the degree of increment consumption expected from operation of  
13 the new major source or major alteration, and a statement informing the public  
14 of the opportunity for written comment and the time frame, which shall not be  
15 less than thirty days, within which comments are to be submitted.

16 I- L. A copy of the notice required by subsection H shall be sent to the  
17 permit applicant and to the officials and agencies having cognizance over the  
18 location where the proposed major source or major alteration would occur.

19 J- M. No change.

20 K- N. The Director may require the applicant to provide additional informa-  
21 tion or to provide and maintain such facilities or perform such air impact  
22 modeling procedures as are necessary to secure information that will disclose the  
23 nature, extent, quantity or effects of air contaminants discharged into the  
24 atmosphere from the major source or facility described in the application.

25 L- O. The Director shall take final action on the application within  
26 thirty days of the proper filing of the completed application. The Director

1 shall notify the applicant in writing of his approval or denial. Such notification  
2 shall be made available for public inspection in at least one location in the air  
3 quality control region in which the major source is located.

4 M- P. An installation permit shall remain in effect until the operating  
5 permit for such major source is granted, the operating permit for a major source  
6 is amended to reflect the installation of air pollution control equipment, or the  
7 installation permit is cancelled.

8 N- Q. No change.

9  
10  
11 Part 11. Section R9-3-302. is repealed and a new section R9-3-302. is  
12 adopted to read as follows:

13 R9-3-302. Installation permits in nonattainment areas

14 A. Except as provided in subsections C. through J. below, no Class A  
15 installation permit shall be issued to a person proposing to construct a new  
16 major source or make a major alteration to a source located in any nonattainment  
17 area for the pollutant(s) for which the source is classified as a major source  
18 or the alteration is classified as a major alteration unless:

19 1. The person demonstrates that the new major source or the major  
20 alteration will meet an emission limitation which is the lowest achievable  
21 emission rate (LAER) for that source or facility for that specific pollutant(s).

22 2. The person certifies that all existing major sources owned or operated  
23 by that person (or any entity controlling, controlled by, or under common control  
24 with that person) in the State are in compliance with all conditions contained  
25 in the operating or conditional permits of each of the sources.

26 3. The person demonstrates that emission reductions for the specific

1 pollutant(s) from source(s) in existence in the allowable offset area of the new  
2 major source or major alteration (whether or not under the same ownership) meet  
3 the offset requirements of R9-3-303. (offset section).

4 4. The person demonstrates that its emissions will not cause concentrations  
5 for a specific pollutant to exceed the applicable increase over baseline concen-  
6 tration established in R9-3-217.B. in any attainment area.

7 B. No Class A installation permit shall be issued to a person proposing to  
8 construct a new major source for volatile organic compounds or carbon monoxide  
9 (or both) or make a major alteration for volatile organic compounds or carbon  
10 monoxide (or both) to a source located in a nonattainment area for photochemical  
11 oxidants or carbon monoxide (or both) unless:

12 1. The person performs an analysis of alternative sites, sizes, production  
13 processes and environmental control techniques for such new major source or  
14 major alteration; and

15 2. The Director determines that the analysis demonstrates that the benefits  
16 of the new major source or major alteration outweigh the environmental and  
17 social costs imposed as a result of its location, construction or alteration.

18 C. The requirements of paragraph A.1. and A.3., and subsection B. shall not  
19 apply with respect to a specific pollutant if a person applies for an installation  
20 permit under this section and can demonstrate that the increase in allowable  
21 emissions of that pollutant from the new major source or major alteration would  
22 be less than 50 tons per year, 1,000 pounds per day or 100 pounds per hour,  
23 whichever is most restrictive.

24 D. The requirements of subsections A. and B. shall not apply with respect  
25 to a specific pollutant and the new major source or major alteration will, instead,  
26 be subject to the requirements of R9-3-304. and R9-3-3-5. if the person seeking

1 an installation permit under this section can demonstrate that on the proposed  
2 start-up date of the new major source or major alteration:

3 1. The Arizona ambient air quality standard for that pollutant will not be  
4 violated in the immediate vicinity of the new major source or major alteration  
5 by the emissions of that pollutant from such new major source or major alteration  
6 and;

7 2. The new major source or major alteration would not contribute to a  
8 violation of Arizona ambient air quality standards. A new major source or major  
9 alteration will not be considered to contribute to a violation of the Arizona  
0 ambient air quality standards unless the allowable emissions from that new major  
1 source or major alteration will cause an increase in ambient concentrations of  
2 such pollutant by an amount in excess of the significance level for such pollutant  
3 in an area in which Arizona ambient air quality standards will be violated on  
4 the projected start-up date of the new major source or major alteration. This  
5 exception shall not be applicable to a new major source for volatile organic  
6 compounds or major alteration for volatile organic compounds to a source which  
7 will be located in a nonattainment area for photochemical oxidants.

8 E. If a person applying for an installation permit under this section  
9 demonstrates compliance with the requirements of paragraph D.1., but the allowable  
0 emissions of a specific pollutant from the new major source or major alteration  
1 will cause concentrations of that pollutant in excess of the significance levels  
2 described in paragraph D.2., then the new major source or major alteration shall  
3 comply with the requirements of paragraphs A.1., A.2., and B. of this section.  
4 The new major source or major alteration shall also comply with the offset  
5 requirement in paragraph A.3. to the extent necessary to reduce the impact of  
6 its emissions below the significance levels in the area in which those levels

1 would otherwise be exceeded.

2 F. The requirements of paragraph A.3. shall not apply with respect to  
3 emissions of a specified pollutant, if the person applying for an installation  
4 permit under this section can demonstrate that the increase in allowable emissions  
5 of that pollutant from the new major source or major alteration after the  
6 imposition of lowest achievable emission rate will be less than 50 tons per year,  
7 1,000 pounds per day or 100 pounds per hour, whichever is most restrictive.

8 G. The requirements of paragraph A.3. shall not apply to emissions of a  
9 specified pollutant if the person applying for an installation permit under this  
10 section can demonstrate that the emissions of that pollutant from the new major  
11 source or major alteration are of a temporary nature including but not limited  
12 to those from a pilot plant, a portable facility, construction, or exploration  
13 and notice is given to the Director of at least thirty (30) days prior to relocation  
14 of such new major source or major alteration identifying the proposed new location  
15 and the probable duration of operation at such location.

16 H. The requirements of paragraph A.3. shall not apply to emissions of a  
17 specified pollutant if the person applying for an installation permit under this  
18 section can demonstrate that emissions of that pollutant from the new major  
19 source or major alteration will not exceed the allowance permitted for such  
20 pollutant specified in an applicable growth allowance plan adopted pursuant to  
21 Sections 172 and 173 of the Act.

22 I. The requirements of paragraph A. shall not apply to particulate emissions  
23 from a new major source for particulates or major alteration for particulates to  
24 a source located in a nonattainment area for particulates, and the requirements  
25 of Sections R9-3-304. and R9-3-305. shall instead be applicable, if the person  
26 applying for an installation permit under this section can demonstrate that on

1 the projected start-up date:

2 1. The nonattainment area for particulates does not contain more than  
3 fifty thousand (50,000) permanent residents (or, in the event such nonattainment  
4 area extends beyond fifty (50) kilometers from the new major source or major  
5 alteration point of greatest emissions, then that portion of the nonattainment  
6 area for particulates within fifty (50) kilometers from such point does not  
7 contain more than fifty thousand (50,000) permanent residents), and there is no  
8 other nonattainment area for particulates containing more than fifty thousand  
9 (50,000) permanent residents within fifty (50) kilometers from the new major  
10 source or major alteration point of greatest emissions; and,

11 2. The total point source emissions of particulates from all sources in  
12 the nonattainment area as well as the total point source emissions of particulates  
13 from all point sources subject to operating permits which contribute to increases  
14 in ambient concentrations of particulates in the nonattainment areas in excess  
15 of the significance levels for particulates, taking into account all other  
16 applicable point source emission increases or major alterations projected to  
17 occur prior to the start-up of the new major source or major alteration, will not  
18 cause the Arizona ambient air quality standards for particulates to be violated.

19 J. New resource recovery projects burning municipal solid waste and  
20 sources compelled to undergo a major alteration by Federal or State law shall  
21 be exempt from the requirements of paragraph A.3. if such major source can  
22 demonstrate that:

23 1. It made its best efforts to meet the requirements of paragraph A.3. and  
24 such efforts were unsuccessful; and

25 2. All available emission offsets have been or will be secured; and

26 3. It will continue to seek offsets and apply them when they become available.



1 Part 12. Section R9-3-303, Offset standards, is repealed and a new  
2 section R9-3-303 is adopted to read as follows:

3 R9-3-303. Offset standards

4 A. Increased emissions by a new major source or a major alteration  
5 subject to this section must be offset by reductions in the emission of  
6 each pollutant for which the area has been designated as nonattainment and  
7 for which the source is classified as a major source or the alteration of  
8 the source is classified as a major alteration. Such offset may be ob-  
9 tained by reductions in emissions from the major source or major altera-  
10 tion or from any other source (including but not limited to non-major  
11 stationary sources, mobile sources, non-point sources and major sources)  
12 in existence or projected, on the startup date of the new major source or  
13 major alteration, to be located in the allowable offset area.

14 B. An offset will not be sufficient unless total emissions for the  
15 particular pollutant for which the offset is required in the allowable off-  
16 set area after the new major source or major alteration commences operation  
17 will be less than the baseline of the total emissions for that pollutant  
18 and such reductions are sufficient to satisfy the Director that emissions  
19 from the new major source or major alteration together with the offset  
20 will result in reasonable further progress for that pollutant in the allow-  
21 able offset area.

22 1. Only intrapollutant emission offsets shall be allowed. Intrapollutant  
23 emission offsets for ozone (or photochemical oxidants) and nitrogen dioxide  
24 shall include offset reductions in emissions of volatile organic compounds  
25 and oxides of nitrogen, respectively.

26 C. For purposes of this Section, "reasonable further progress" shall

mean annual incremental reductions in emissions of the applicable air pollutant which are sufficient in the judgment of the Director to provide for attainment of the applicable air quality standards by the date required under Section 172 of the Act. Reasonable further progress shall be deemed to occur if the offset reductions are sufficient to satisfy the Director that the construction of the new major source or major alteration together with the offset will result in a net air quality benefit.

1. For purposes of this Section, "net air quality benefit" shall mean that during similar time periods either a or b, below, is applicable:

a. A reduction in the number of violations of the applicable Arizona ambient air quality standard within the allowable offset area has occurred and the following mathematical expression is satisfied:

$$\sum_{i=1}^N \frac{x_i - C}{N} \leq \sum_{j=1}^K \frac{x_j - C}{K}$$

where:

C = The applicable Arizona ambient air quality standard

$x_i$  = The concentration level of the violation at the  $i^{\text{th}}$  receptor for such pollutant after offsets.

N = The number of violations for such pollutant after offsets ( $N \leq K$ ).

$x_j$  = The concentration level of the violation at the  $j^{\text{th}}$  receptor from such pollutant before offsets.

K = The number of violations for such pollutant before offsets.

b. The average of the ambient concentrations within the allowable offset area following the implementation of the contemplated offsets will be less than the average of the ambient concentrations within the allowable offset area without the offsets.

1 D. Baseline further defined:

2 1. For the purpose of this Section, the baseline of total emissions  
3 from any sources in existence or sources which have obtained an installa-  
4 tion permit (regardless of whether or not such sources are in actual operation  
5 at the time of filing of the Class A installation permit application for  
6 any particular pollutant) will be the regulatory emission limitations in  
7 effect at the time the application is filed as well as all emission  
8 limitations included as conditions on permits (or if no emission limitations  
9 are applicable to a source from which offsets are being sought, then the  
10 actual or expected emissions).

11 2. Where the emission limitations for a particular pollutant allow  
12 greater emissions than the potential emission rate of the source for that  
13 pollutant, the baseline shall be the potential emission rate at the time the  
14 permit application is filed.

15 E. Reduced allowable emissions from a source due to a change by such  
16 source to a cleaner fuel may be used to offset emissions from the new major  
17 source or major alteration as long as the change will occur prior to  
18 start-up of the new major source or major alteration. A permit issued  
19 pursuant to this subsection shall be conditioned to require the  
20 installation and use of a specified alternative control measure  
21 which will achieve the same degree of emission reduction should the source  
22 switch back to a less clean fuel at some later date. In the event a  
23 source can demonstrate to the satisfaction of the Director that it has  
24 secured an adequate long term supply of the new cleaner fuel, a permit issued  
25 pursuant to this subsection shall not be conditioned to require the in-  
26 stallation and use of a specified alternative control measure. Emission

1 reductions obtained through a change to a cleaner fuel may be used to off-  
2 set emissions from the new major source or major alteration even if, as a  
3 result of the fuel change, the source from which the offsets are obtained  
4 becomes subject to a more stringent emission limitation than the emission  
5 limitation to which such source was subject prior to the fuel change.

6 F. Offsets shall be made on either a pounds per hour, pounds per day, or  
7 tons per year basis, whichever is applicable, when all facilities involved in the  
8 emission offset calculations are operating at their maximum expected or  
9 allowed production rate and, except as otherwise provided in paragraph E  
10 of this section, utilizing the type of fuel burned at the time the permit  
11 application is filed. A new major source or major alteration may be  
12 credited with emission reductions achieved by the shutdown of a source or  
13 the curtailment of production of a source below that which constituted that  
14 source's maximum expected or allowed production rate at the time the appli-  
15 cation was submitted or due to the expiration of a source's operating permit.

16 G. The allowable offset area shall refer to the geographical area in  
17 which are located the sources whose emissions are being sought for purposes  
18 of offsetting emissions from a new major source or major alteration. For  
19 the pollutants sulfur dioxide, particulate and carbon monoxide, the allow-  
20 able offset area shall be any area in which Arizona ambient air quality  
21 standards for such pollutants are violated and in which the significance  
22 levels are exceeded due to the emissions from such new major source or major  
23 alteration. The area shall be determined by atmospheric simulation model-  
24 ing. If the emission offsets are obtained from a source on the same premises  
25 or in the immediate vicinity of the new major source or major alteration,  
26 and the pollutants disperse from substantially the same effective stack

1 height, atmospheric simulation modeling shall not be required. The allow-  
2 able offset area for all other pollutants shall be the nonattainment areas  
3 for those pollutants within which the new major source or major altera-  
4 tion is to be located and those portions of attainment areas located within  
5 fifty (50) kilometers of such nonattainment areas.

6 H. An emission reduction may only be used to offset emissions if the  
7 reduced level of emissions is legally enforceable. It will be considered  
8 legally enforceable if it is included as a condition in the operating permit  
9 issued to the source whose emissions are used to offset emissions from the  
10 new major source or major alteration, or in the case of reductions from  
11 sources controlled by the applicant, is included as a condition of the  
12 installation permit, or is adopted as a part of these Rules and Regula-  
13 tions or comparable rules and regulations of any other governmental  
14 entity or is contractually enforceable by the Department.

15 I. An offset required by this Article may include reductions that  
16 result from State, county, or local measures to reduce emissions from  
17 sources in existence in an amount sufficient to offset emissions from a new  
18 major source or major alteration.

19  
20  
21 Part 13. Section R9-3-304, Installation permits in attainment areas,  
22 is repealed and a new section R9-3-304 is adopted to read as follows:

23 R9-3-304. Installation permits in attainment areas

24 A. Except as provided in subsections B. through F. below, no Class A  
25 installation permit shall be issued to a person proposing to construct a  
26 new major source or make a major alteration to a source located in any

1 attainment area for the pollutant (s) for which the source is classified  
2 as a major source or the alteration is classified as a major alteration un-  
3 less:

4 1. The person demonstrates that the new major source or major altera-  
5 tion will meet an emission limitation which is the best available control  
6 technology (BACT) for that source or facility for the specific pollutant (s).

7 2. The person applying for the permit performs an air impact analysis  
8 and monitoring as specified in R9-3-305 (air impact analysis section) and  
9 such analysis demonstrates that allowable emission increases from the pro-  
10 posed new source or major alteration on its projected start-up date, in  
11 conjunction with all other applicable emission increases or reductions:

12 a. Would not exceed the applicable increase over baseline concentration  
13 established in R9-3-217.8. for each attainment area; and

14 b. Would not contribute to an increase in ambient concentrations for  
15 each such pollutant by an amount in excess of the significance level for  
16 such pollutant in any area in which Arizona primary or secondary ambient air  
17 quality standards are being violated. A new major source for volatile  
18 organic compounds or major alteration for volatile organic compounds will be  
19 presumed to contribute to violations of the Arizona ambient air quality  
20 standards for photochemical oxidants if it will be located within fifty (50)  
21 kilometers of a nonattainment area for photochemical oxidants. The presump-  
22 tion may be rebutted for a new major source or major alteration if it can be  
23 satisfactorily demonstrated to the Director that emissions of volatile organic  
24 compounds from the new major source or major alteration will not contribute  
25 to violations of the Arizona ambient air quality standards for photochemical  
26 oxidants in adjacent nonattainment areas for photochemical oxidants. Such a

1 demonstration shall include a showing that topographical, meteorological or  
2 other physical factors in the vicinity of the new major source or major  
3 alteration are such that transport of volatile organic compounds emitted  
4 from the source are not expected to contribute to violations of the photo-  
5 chemical oxidant standards in the adjacent nonattainment area.

6 B. If the air impact analysis required by paragraph A.2. demonstrates  
7 that the proposed new major source or major alteration will cause an in-  
8 crease in ambient concentrations for any pollutant by an amount in excess  
9 of the significance level for such pollutant in any area for that pollutant  
10 specified in subparagraph A.2.b. or will contribute to violations of the  
11 Arizona ambient air quality standard for photochemical oxidants in any area  
12 specified in subparagraph A.2.b., then the person applying for an installa-  
13 tion permit under this section, and only if such person is not otherwise  
14 exempted pursuant to Section 302, must meet the requirements of R9-3-302.A.1.,  
15 R9-3-302.A.2., and R9-3-302.B. The new major source or major alteration  
16 shall also comply with the offset requirements in paragraph A.3. to the  
17 extent necessary to reduce the impact of its emissions below the  
18 applicable significance level in the nonattainment area in which those  
19 levels would otherwise be exceeded.

20 C. The requirements of paragraph A.1. shall not apply with respect  
21 to a particular pollutant if the person applying for an installation permit  
22 under this section can demonstrate that the increase in allowable emissions  
23 of that pollutant from the new major source or major alteration would be  
24 less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour,  
25 whichever is most restrictive.

26 D. The requirements of paragraph A.2. shall only apply to emissions

1 from an identifiable plume or emission point.

2 E. The requirements of paragraph A.2. shall not apply with respect  
3 to a particular pollutant if the person applying for an installation permit  
4 under this section can demonstrate that:

5 1. The increase in allowable emissions of that pollutant from the  
6 new major source or major alteration would not significantly impact any  
7 Class I area and any other area where an applicable class increment is  
8 known to be violated; and,

9 2. The increase in allowable emissions of that pollutant from the  
10 new source or major modification would be less than 50 tons per year, 1,000  
11 pounds per day, or 100 pounds per hour, whichever is the most restrictive;  
12 or

13 3. The emissions of the pollutant from the new major source or major  
14 alteration are of a temporary nature including but not limited to those  
15 from a pilot plant, a portable facility, construction, or exploration.

16 F. The requirements of paragraph A.2. shall not apply to a major  
17 alteration if the person applying for an installation permit under this  
18 section can demonstrate to the Director that:

19 1. No net increase in emissions would occur at the source, taking  
20 into account all emissions increases and decreases at the source which  
21 would accompany the major alteration; and

22 2. No adverse air quality impact would result from the major  
23 alteration.

24 G. Special rules applicable to Federal Land Managers:

25 1. Notwithstanding any other provision of this section, a Federal Land  
26 Manager may present to the Director a demonstration that the emissions



1 attributed to such new major source or major alteration to a source in existence  
2 will have significant adverse impact on visibility or other specifically defined  
3 air quality related values of any Federal Mandatory Class I area designated in  
4 R9-3-217.A.2., regardless of the fact that the change in air quality resulting  
5 from emissions attributable to such new major source or major alteration to a  
6 source in existence will not cause or contribute to concentrations which exceed  
7 the maximum allowable increases for Class I area. If the Director concurs with  
8 such demonstrations, the permit shall be denied.

9 2. If the owner or operator of a proposed new major source or a source in  
10 existence for which major alteration is proposed demonstrates to the Federal  
11 Land Manager that the emissions attributable to such major source or major  
12 alteration will have no significant adverse impact on the visibility or other  
13 specifically defined air quality related values of such areas and the Federal  
14 Land Manager so certifies to the Director, the Director may issue a permit  
15 notwithstanding the fact that the change in air quality resulting from emissions  
16 attributable to such new major source or major alteration will cause or contribute  
17 to concentrations which exceed the maximum allowable increases for a Class I  
18 area. Such a permit shall require that such new major source or major alteration  
19 comply with such emission limitations as may be necessary to assure that emissions  
20 will not cause increases in ambient concentrations greater than the following  
21 maximum allowable increases over baseline concentrations for such pollutants:

22 Maximum Allowable Increase  
23 (Micrograms per cubic meter)

24 Particulate matter:

25 Annual geometric mean -	19
26 24-hour maximum -	37

1 Sulfur Dioxide:

2 Annual arithmetic mean -	20
3 24-hour maximum -	91
4 3-hour maximum -	325

5 3. The owner or operator of a new major source or major alteration which  
6 cannot be approved under paragraphs G.1., and G.2., may demonstrate to the  
7 Governor or his designee, after notice and public hearing, that the major source  
8 or major alteration cannot be constructed by reason of any maximum allowable  
9 increase for sulfur dioxide for periods of 24 hours or less applicable to any  
10 Class I area, and in the case of a mandatory Class I area, that a variance under  
11 this paragraph will not adversely affect the visibility or other specifically  
12 defined air quality related values of the area. The governor or his designee,  
13 after consideration of the Federal Land Manager's recommendation (if any) and  
14 subject to his concurrence, may grant a variance from such maximum allowable  
15 increase.

16 4. A variance recommended by the Governor, but in which the Federal Land  
17 Manager does not concur, must be approved by the President pursuant to the  
18 procedures of section 165 of the Act.

19 5. If a variance is granted pursuant to paragraph G.3., such new major  
20 source or facility which undergoes a major alteration shall comply with such  
21 emissions limitations under such permit as may be necessary to assure that  
22 emissions of sulfur oxides from such source or facility will not (during any  
23 day on which the otherwise applicable maximum allowable increases are exceeded)  
24 cause or contribute to concentrations which exceed the following maximum  
25 allowable increases for such Class I areas over the baseline concentration for  
26 such pollutant and to assure that such emissions will not cause or contribute to

1 concentrations which exceed the otherwise applicable maximum allowable increases  
2 for periods of exposure of 24 hours or less on more than 18 days during any  
3 annual period:

4 Maximum Allowable Increase  
5 (Micrograms per cubic meter)

6 Sulfur Oxides

7 Period of exposure:

8 Low terrain areas;

9 24-hour maximum - 36

10 3-hour maximum - 130

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1 High terrain area;

2 24-hour maximum - 62

3 3-hour maximum - 221

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6 Part 14. Section R9-3-305, Air quality impact analysis and monitoring  
7 requirements, is amended to read as follows:

8 A. The air quality impact analysis required by R9-3-304, shall include,  
9 at the discretion of the Director, any or all of the following:

10 1. A description of the nature, location, design, capacity and typical  
11 operating schedule of the proposed new major source or major alteration in-  
12 cluding specifications and drawings showing the design and plan layout of the  
13 major source or major alteration;

14 2. A schedule of construction of the new major source or major altera-  
15 tion;

16 3. A detailed description as to what system of continuous emission re-  
17 duction is planned for the proposed new major source or major alteration,  
18 emission estimates, and any other information necessary to determine that  
19 emission limitations will be met;

20 4. An analysis of the impairment to visibility, soils and vegetation  
21 that would occur as a result of the proposed new major source or major  
22 alteration and general commercial, residential, industrial and other growth  
23 associated with the major source or major alteration. The permit applicant  
24 need not provide an analysis of the impact on vegetation having no signi-  
25 ficant commercial or recreational value.

26 5. An analysis of continuous air quality monitoring data for any

1 pollutant for which will-be-emitted-by the source is a new major source  
2 or the alteration of the facility is classified as a major alteration and  
3 for which a an Arizona national ambient air quality standard exists, except  
4 non-methane hydrocarbons. Such data shall relate to, and shall have been  
5 gathered over the year preceding receipt of the complete application, un-  
6 less the owner or operator demonstrates to the Director's satisfaction that  
7 such data gathered over a portion or portions of that year or another  
8 representative year would be adequate to determine that the new major source  
9 or major alteration would not cause or contribute to a violation of an  
10 Arizona air quality standard contained in Article 2.

11 6. The air quality impact of the proposed major source or major al-  
12 teration including meteorological and topographical data necessary to make  
13 such estimates.

14 7. Information on the air quality impacts of growth associated  
15 with the proposed major source or major alteration as well as the nature  
16 and extent of general commercial, residential, industrial and other growth  
17 which has occurred in the area affected by the source's emissions since  
18 August 7, 1977.

19 8. The person applying for an installation permit ~~in an attainment area~~  
20 under Section R9-3-304 to which this Section applies, after construction of  
21 the new major source or a major alteration, shall conduct such ambient  
22 air quality monitoring as the Director determines may be necessary to es-  
23 tablish the effect which emissions from the new major source or major  
24 alteration of a pollutant for which a national ambient air quality standard  
25 exists (other than non-methane hydrocarbons) may have, or is having, on  
26 attainment or maintenance of Arizona ambient air quality standards in an  
area which such emissions would affect.

1  
2 Part 15. Section R9-3-306, Operating permits, is amended to read as  
3 follows:

4 A. Except as provided in this section or R9-3-1101 (Jurisdiction and  
5 Authority), no person shall operate any major source without first ob-  
6 taining an operating permit from the Director. When an installation permit  
7 is required to commence construction of a new major source or major altera-  
8 tion of major source an operating permit shall not be issued to the new major  
9 source or for the major alteration until such time as the installation permit  
10 has been obtained. In the event a person operating any major source unin-  
11 tentionally commences construction or major alteration activities for which  
12 an installation permit is required pursuant to Chapter 3 without obtaining  
13 such installation permit, such person shall be required to present to the  
14 Director all necessary information which is required to be submitted by an  
15 applicant for an installation permit and the new major source or major al-  
16 teration shall be made to conform to all applicable standards.

17 B. No operating permit will be issued unless:

18 1. The applicant demonstrates that the major source will be in com-  
19 pliance with all applicable regulatory standards of the Department.

20 ~~2. The source will not emit any air pollutants in amounts which will~~  
21 ~~prevent attainment or maintenance in any other state of any national primary~~  
22 ~~or secondary ambient air quality standards.~~

23 3. 2. For any major source operating in a nonattainment area for any  
24 pollutant (s) for which the source is classified as a major source, the  
25 owner or operator demonstrates ~~that there will be reductions in the emissions~~  
26 ~~of such pollutant (s) as may be obtained through the adoption of~~ compliance

1 with reasonably available control technology.

2       -4- 3. The person applying for an operating permit demonstrates that  
3 the new major source or major alteration will not emit pollutants in excess  
4 of the applicable hazardous air pollutant standards contained in Article 9  
5 (Hazardous air pollutant standards).

6       5- 4. The person applying for an ~~operation~~ operating permit demon-  
7 strates that the new major source or major alteration will not emit  
8 pollutants in excess of the applicable emission limitation for non-point  
9 sources contained in Article 4.

10       D. Applications for operating permit:

11       1. An application for an operating permit shall be made on forms fur-  
12 nished by the Director.

13       2. A separate application is required for each major source.

14       3. Each application shall be signed by the applicant.

15       4. Each application for an initial operating permit shall be accom-  
16 panied by plans, descriptions, specifications and drawings showing the  
17 design of the new major source or major alteration, stack data, the nature  
18 and amount of emissions. An application for a renewal of an operating  
19 permit shall be accompanied by plans, descriptions, specifications and  
20 drawings showing any changes in ~~plant~~ the major source's configuration from  
21 that which existed on the date of issuance of the most recent operating  
22 permit.

23       5. Each application shall include information concerning compliance  
24 with any conditions on any prior permit.

25       6. The application shall include such information as is required by  
26 Appendix 2 and such other information as the Director or applicable pro-

1 visions of these regulations shall prescribe.

2 7. The Director may waive the submission by the applicant of any of  
3 the data or information required by this Section if he shall deem such  
4 data to be inappropriate or unnecessary.

5 D. No change.

6 E. The Director may require the applicant to provide additional in-  
7 formation or to provide and maintain such ambient air monitoring facil-  
8 ities or ambient air impact modeling as necessary to secure information  
9 that will disclose the effect emissions from the major source will have  
10 on maintenance and attainment of ambient air quality standards. An item  
11 of equipment not covered by an operating permit may be operated for  
12 purposes of testing, including accomplishment of new source performance  
13 testing under Article 8 of these rules and regulations, only if specific  
14 written permission has been obtained from the Director designating the dates  
15 of such operation for testing.

16 F. The Director shall take final action on the application within  
17 thirty days of the proper filing of the completed application. The Director  
18 shall notify the applicant in writing of his approval, conditional  
19 approval or denial. Such notification shall be made available for public  
20 inspection in at least one location in the air quality control region  
21 in which the major source is located.

22 G. Each operating permit issued under these Rules and Regulations shall  
23 include the following provisions:

24 1. A description of the facility and equipment covered and its  
25 location, or for a mobile source, the area in which it may operate.

26 2. The name and address of the owner or operator of the major source.



3. The date the permit is issued and the date it will expire.

4. The terms and conditions specified in R9-3-308.

H. The issuance of an operating permit shall not relieve the owner or operator from compliance with any local, state ~~ef~~ or Federal law or regulations, nor does any other law, regulation or permit relieve the owner or operator from obtaining a permit required under this Chapter.

I. Any owner or operator who fails to obtain an operating permit required by ~~the~~ this Chapter, or who fails to comply with a permit as approved and conditioned by the Director, shall be subject to enforcement action under the provisions of Arizona Revised Statutes §§ 36-1709 (order of abatement), 36-1715 (injunctive relief), and 36-1720 (misdemeanor).

J. No change.

Part 16. Section R9-3-307, Replacement, is amended to read as follows:

~~A. An-existing-source-or-facility-would-in-itself-be-considered-a major-source-for-any-pollutant,-upon-replacement,-becomes-a-new-source-and is-subject-to-the-provisions-of-R9-3-301,-irrespective-of-any-change-in emission-rate.~~ Upon replacement a major source or facility located within a major source which, independent of all other facilities located at the source, would itself be considered a major source for a pollutant, becomes a new major source for that pollutant and as such is subject to the requirements of R9-3-301.

B. "Replacement" means the reconstruction of components of an such existing facility to such an extent that:

1. The fixed capital cost of the new components exceeds fifty percent of the fixed capital cost that would be required to construct a comparable entirely new facility and all associated equipment, and

0 2. It is technologically and economically feasible to meet the applic-  
1 able standards set forth in these regulations.

2 C. No change.

3 D. If an owner or operator of an such existing facility proposes to  
4 ~~reconstruct~~ replace components, and the fixed capital cost of the new com-  
5 ponents exceeds fifty percent of the fixed capital cost that would be  
6 required to construct a comparable entirely new facility, he shall notify  
7 the Director of the proposed ~~reconstruction~~ replacement. The notice must  
8 be postmarked not less than sixty days before construction of the components  
9 is commenced and must include the following information:

10 1. Name and address of the owner or operator.

11 2. The location of the existing facility.

12 3. A brief description of the existing facility and the components  
13 which are to be replaced.

14 4. A description of the existing air pollution control equipment and  
15 the proposed air pollution control equipment.

16 5. An estimate of the fixed capital cost of the replacements and of  
17 constructing a comparable entirely new facility.

18 6. The estimated life of the existing facility after the replacements.

19 7. A discussion of any economic or technical limitations the facility  
20 may have in complying with the applicable standards of performance after  
21 the proposed replacements.

22 8. The extent to which ~~consistent with the requirements of R9-3-302-B-2.~~  
23 the proposed replacement would increase allowable emissions at the existing  
24 facility above the allowable emissions level of the existing facility prior  
25 to the proposed replacement.

26 E. No change.

1 F. The Director's determination under paragraph E shall be  
2 based on:

3 1. The fixed capital cost of the ~~reconstructed~~ replaced components in  
4 comparison to the fixed capital cost that would be required to construct a  
5 comparable entirely new facility and all associated equipment;

6 2. The estimated life of the facility after the ~~reconstruction~~ replace-  
7 ment compared to the life of a comparable entirely new facility.

8 3. The extent to which the components being ~~reconstructed~~ replaced cause  
9 or contribute to the emissions from the facility; and

10 4. Any economic or technical limitations on compliance with applicable  
11 standards of performance which are inherent in the proposed ~~reconstruction~~  
12 replacement.

13  
14  
15 Part 17. Section R9-3-309, Finding of no violation, is amended to read  
16 as follows:

17 A. Emissions in excess of an applicable emission limitation shall not  
18 be considered a violation of that limitation or the terms of a person's  
19 installation, operating, or conditional permit if the Director makes a written  
20 finding that:

21 1. The person complied with the excess emissions reporting require-  
22 ments of R9-3-314;

23 2. The person has submitted an application for a finding of no  
24 violation on a form furnished by the Bureau of Air Quality Control within  
25 ~~five~~ fifteen working days of the last date on which excess emissions occurred;

26 3. The excess emissions were attributable to a start-up or shut-down

1 of process or pollution control equipment or a malfunction of such equip-  
2 ment;

3 4. The air pollution control equipment, process equipment, or  
4 processes were at all times maintained and operated, to the maximum  
5 extent practicable, in a manner consistent with good practice for mini-  
6 mizing emissions;

7 5. Where repairs were required, such repairs were made in an  
8 expeditious fashion when the person knew or should have known that  
9 applicable emissions limitations were being exceeded. Off-shift labor and  
10 overtime were utilized where practical to insure that such repairs were  
11 made as expeditiously as possible. If off-shift labor and overtime were  
12 not utilized, the person satisfactorily demonstrated that such measures  
13 were impractical;

14 6. The amount and duration of the excess emissions (including any  
15 bypass operation) were minimized to the maximum extent practicable during  
16 periods of such emissions;

17 7. All feasible steps were taken to minimize the impact of the excess  
18 emissions on potential violations of ambient air quality standards;

19 8. The excess emissions are not part of a recurring pattern indicative  
20 of inadequate design, operation, or maintenance; and,

21 9. During the period of excess emissions for which a finding of no  
22 violation is sought, there were no measured violations of the ambient air  
23 quality standards established in Article 2 of this chapter which could be  
24 attributed to the person.

25 B. No change.

26 C. No change.

1 Part 17A. Section R9-3-313, Existing source emission monitoring, is  
2 amended to read as follows:

3 A. - F.1.a. No change.

4 i. When measurements are on a wet basis, except where wet scrubbers are  
5 employed or where moisture is otherwise added to stack gases, the following  
6 conversion procedure shall be used:

$$7 \quad E \quad \underline{E_Q} = C_{ws} F_w \left( \frac{20.9}{20.9(1 - B_{wa}) - \% O_{2ws}} \right)$$

8  
9 ii. When measurements are on a wet basis and the water vapor content of  
10 the stack gas is determined at least once every fifteen minutes the following  
11 conversion procedure shall be used:

$$12 \quad E \quad \underline{E_Q} = C_{ws} F \left( \frac{20.9}{20.9(1 - B_{ws}) - \% O_{2ws}} \right)$$

13  
14 Note: This equation is approved in principle. Approval for actual prac-  
15 tice is contingent upon demonstrating the ability to accurately determine  $B_{ws}$   
16 such that any absolute error in  $B_{ws}$  will not cause an error of more than  
17  $\pm 1.5$  percent in the term  $\left( \frac{20.9}{20.9(1 - B_{ws}) - \% O_{2ws}} \right)$ .  
18

F.1.a.iii. - F.4.b. No change.

1 Part 18. Section R9-3-401, General, is amended to read as follows:

2 For purposes of this article, any source of air contaminants which due  
3 to lack of an identifiable emission point or plume cannot be considered a  
4 point source, shall be classified as a non-point source. In applying this  
5 criteria, such items as air-curtain destructors, heater-planers, and conveyor  
6 transfer points shall be considered to have identifiable plumes. Any affected  
7 facility subject to regulation under Article 5 or Article 8 of this Chapter  
8 shall not be subject to regulation under this Article.  
9  
10

11 Part 19. Section R9-3-405, Roadways and streets, is amended to read as  
12 follows:

13 A. No person shall cause, suffer, allow or permit the use, repair, con-  
14 struction or reconstruction of a roadway or alley without taking reasonable  
15 precautions to prevent excessive amounts of particulate matter from becoming  
16 airborne. Dust and other particulates shall be kept to a minimum by employing  
17 temporary paving, dust suppressants, wetting down, detouring or by other  
18 reasonable means.

19 B. No person shall cause, suffer, allow or permit transportation of  
20 materials likely to give rise to airborne dust without taking reasonable pre-  
21 cautions, such as wetting, applying dust suppressants, or covering the load,  
22 to prevent particulate matter from becoming airborne. Earth or other material  
23 that is deposited by trucking or earth moving equipment shall be removed from  
24 paved streets by the person responsible for such deposits.  
25  
26

1       Part 20. Section R9-3-408, Mineral tailings, is amended to read as  
2 follows:

3       No person shall cause, suffer, allow, or permit construction of mineral  
4 tailings piles without taking reasonable precautions to prevent excessive  
5 amounts of particulate matter from becoming airborne. Reasonable precautions  
6 shall mean wetting, chemical stabilization, revegetation or such other measures  
7 as are approved by the Director.

8  
9  
10       Part 21. Section R9-3-501, Visible emissions: general, is amended to  
11 read as follows:

12       A. Except as otherwise provided in these regulations relating to specific  
13 types of sources, the opacity of any plume or effluent shall not be greater  
14 than 40 percent as determined by reference method 9 in the Arizona Testing  
15 Manual.

16       B. Where the presence of uncombined water is the only reason for the  
17 exceedance of any visible emissions requirements in these regulations, such  
18 exceedance shall not constitute a violation of these regulations.

19       C. Upon written application to the Director, a person owning or operating  
20 an air pollution source may request that a visible emissions evaluation be  
21 conducted by the Bureau during a particulate emissions test demonstrating  
22 compliance with a particulate emission standard. The visible emissions opacity  
23 during a particulate emission test demonstrating compliance shall, if greater  
24 than the opacity standard of subsection A., serve as the visible emissions  
25 standard for the source. Such visible emissions standard shall be incorporated  
26 as a condition of the operating permit for the air pollution source.

1 D. Application of subsections A. and B. of this section shall be stayed  
2 only with regard to existing copper smelters operating pursuant to a conditional  
3 operating permit on March 5, 1977 for a period ending not later than July 1, 1979  
4 December 31, 1979.

5  
6  
7 Part 22. Section R9-3-502, Unclassified sources, is amended to read as  
8 follows:

9 A. No existing major ~~existing-stationary~~ source which is not otherwise  
10 covered under any other section of these regulations shall cause or permit  
11 the emission of pollutants at rates greater than the following:

12 1. No person shall cause, suffer, allow or permit the discharge of  
13 particulate matter into the atmosphere ~~from any emission point~~ in any one hour  
14 from any unclassified process source outside the Phoenix-Tucson Air Quality  
15 Control Region in total quantities in excess of the amounts calculated by the  
16 equations set forth below.

17 a. For process sources having a process weight rate of 60,000 pounds  
18 per hour (30 tons per hour) or less, the maximum allowable emissions shall be  
19 determined by the following equation:

20 
$$E = 4.10P^{0.67}$$

21 where:

22 E = the maximum allowable particulate emissions rate in pounds-mass per  
23 hour.

24 P = the process weight in tons-mass per hour.

25 b. For process weight rate greater than 60,000 pounds per hour (30 tons  
26 per hour), the maximum allowable emissions shall be determined by the following



1 equation:

$$2 \quad E = 55.0P^{0.11} - 40$$

3 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
4 section.

5 2. No person shall cause, suffer, allow or permit the discharge of  
6 particulate matter into the atmosphere ~~from any emission point~~ in any one  
7 hour from any unclassified process source located in the Phoenix-Tucson Air  
8 Quality Control Region in total quantities in excess of the amount calculated  
9 by the equations set forth below.

10 a. For process sources having a process rate of 60,000 pounds per hour  
11 (30 tons per hour) or less, the maximum allowable emissions shall be determined  
12 by the following equation:

$$13 \quad E = 3.59P^{0.62}$$

14 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
15 section.

16 ~~E---the-maximum-allowable-particulate-emissions-rate-in-pounds-mass-per~~  
17 ~~hour.~~

18 b. For process industries having a process weight rate greater than  
19 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
20 shall be determined by the following equation:

$$21 \quad E = 17.31P^{0.16}$$

22 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
23 section.

24 3. For purposes of this regulation, the total process weight from all  
25 similar units employing a similar type process shall be used in determining  
26 the maximum allowable emission of particulate matter.

1 e- 4. For reference only, the equations in paragraphs A.1. and A.2. of  
2 this section are plotted in Appendix 11, Figure 2. The emission values obtained  
3 from the graph are approximately correct for the process weight rates shown.  
4 However, the actual values shall be calculated from the applicable equations  
5 and rounded off to two decimal places.

6 3- 5. Sulfur dioxide - 600 parts per million.

7 4- 6. Nitrogen oxides expressed as  $\text{NO}_2$  - 500 parts per million.

8 B. No change.

9 C. No change.

10 D. No change.

11 E. No change.

12 F. No change.

13 G. No change.

14  
15  
16 Part 23. Section R9-3-503, Standards of performance for existing fossil-  
17 fuel fired steam generators and general fuel burning equipment, is amended to  
18 read as follows:

19 A. No change.

20 B. For purposes of this section, the heat input shall be the aggregate  
21 heat content of all fuels whose products of combustion pass through a stack or  
22 other outlet. The heat content of solid fuel shall be determined in accordance  
23 with R9-3-310.B. Compliance tests shall be conducted during operation at the  
24 nominal rated capacity of each unit. The heat input value used shall be the  
25 equipment manufacturer's or designer's guaranteed maximum input, whichever  
26 is greater. The total heat input of all fuel-burning units on a plant or

1 premise shall be used for determining the maximum allowable amount of  
2 gaseous or particulate matter which may be emitted.

3 C. The provisions of this section are applicable to fossil-fuel fired  
4 steam generating units or general fuel burning equipment which are existing or  
5 for which construction or major alteration has commenced prior to the effective  
6 date of this section; or which are of less than 73 megawatts capacity.

7 1. The standard for particulate matter under this section is:

8 a. No person shall cause, suffer, allow or permit the emission of particu-  
9 late matter, caused by combustion of fuel, from any fuel-burning operation  
10 subject to the provisions of this section in excess of the amounts calculated  
11 by the equations presented below:

12 i. For equipment having a heat input rate of 4200 million Btu per hour  
13 or less, the maximum allowable emissions shall be determined by the following  
14 equation:

$$15 \quad E = 1.02Q^{0.769}$$

16 where:

17 E = the maximum allowable particulate emissions rate in pounds-mass per  
18 hour.

19 Q = the heat input in million Btu per hour.

20 ii. For equipment having a heat input rate greater than 4200 million  
21 Btu/hr, the maximum allowable emissions shall be determined by the following  
22 equation:

$$23 \quad E = 17.0Q^{0.432}$$

24 where "E" and "Q" have the same meaning as in subdivision i. above.

25 b. For reference purposes only, the two equations in subparagraph C.1.a.  
26 are plotted in Appendix 11, Figure 1. The emission values obtained from the

1 graph are approximately correct for the heat input rates shown. However,  
2 the actual values shall be calculated from the applicable equations and  
3 rounded off to two decimal places.

4 2. Except as provided in paragraph C.3. of this section, the standard  
5 for sulfur dioxide under this section is:

6 a. Existing fuel burning equipment or steam power generating installa-  
7 tions which commenced construction or a major alteration prior to May 30, 1972  
8 shall not emit more than 1.0 pounds sulfur dioxide maximum three hour average,  
9 per million Btu (430 nanograms per joule) heat input when low sulfur oil is  
10 fired.

11 b. Existing fuel burning equipment or steam power generating installa-  
12 tions which commenced construction or a major alteration after May 30, 1972  
13 shall not emit more than 0.80 pounds of sulfur dioxide maximum three hour  
14 average per million Btu (340 nanograms per joule) heat input when low sulfur  
15 oil is fired.

16 c. All existing steam power generating and general fuel burning instal-  
17 lations which are subject to the provisions of this section shall not emit  
18 more than 2.2 pounds of sulfur dioxide maximum three-hour average per million  
19 Btu (946 nanograms per joule) heat input when high sulfur oil is fired.

20 d. Existing general fuel burning equipment and steam power generating  
21 installations which commenced construction or a major alteration prior to  
22 May 30, 1972 shall not emit more than 1.0 pounds of sulfur dioxide maximum  
23 three-hour average, per million Btu (430 nanograms per joule) heat input when  
24 solid fuel is fired.

25 e. Existing general fuel burning equipment and steam power generating  
26 installations which commenced construction or major alteration after May 30,

1 1972 shall not emit more than 0.80 pounds, maximum three-hour average, per  
2 million Btu (340 nanograms per joule) heat input when solid fuel is fired.

3 f. Any permit issued for the operation of an existing source, or any  
4 renewal or modification of such a permit, shall include a condition prohibiting  
5 the use of high sulfur oil by the permittee, unless the applicant demonstrates  
6 to the satisfaction of the Director that sufficient quantities of low sulfur  
7 oil are not available for use by the source, and that it has adequate facili-  
8 ties and contingency plans to insure that the sulfur dioxide ambient air quality  
9 standards set forth in section R9-3-202, will not be violated. The terms of  
10 the permit may authorize the use of high sulfur oil under such conditions as  
11 are justified. In cases where the permittee is authorized to use high sulfur  
12 oil it shall submit to the department monthly reports detailing its efforts to  
13 obtain low sulfur oil. When the conditions justifying the use of high sulfur  
14 oil no longer exists, the permit shall be modified accordingly. Nothing in  
15 this section shall be construed as allowing the use of a supplementary control  
16 system or other form of dispersion technology.

17 g. For purposes of this regulation low sulfur oil means fuel oil con-  
18 taining less than 0.90 percent of weight by sulfur and high sulfur oil means  
19 fuel oil containing 0.90 percent or more by weight of sulfur.

20 3. In the event a person obtained an installation permit prior to the  
21 effective date of these rules and regulations for two or more fuel burning  
22 equipment or steam power generating installations which permitted such person  
23 to comply with the sulfur dioxide emission standards specified in paragraph C.2.  
24 of this section as if such equipment or installations constituted one emission  
25 discharge point, such person shall comply with the applicable sulfur dioxide  
26 emission standards in the manner specified in its installation permit and such

1 emission standards shall be incorporated into such person's operating permit  
2 as an enforceable permit condition.

3       3- 4. Existing steam power generating installations which commenced con-  
4 struction or a major alteration after May 30, 1972 shall not emit nitrogen  
5 oxides in excess of the following amounts.

6           a. 0.20 pounds of nitrogen oxides, maximum three-hour average, calculated  
7 as nitrogen dioxide, per million Btu heat input when gaseous fossil fuel is  
8 fired.

9           b. 0.30 pounds of nitrogen oxides, maximum three-hour average, calculated  
10 as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is  
11 fired.

12           c. 0.70 pounds of nitrogen oxides, maximum three-hour average, calculated  
13 as nitrogen dioxide, per million Btu heat input when solid fossil fuel is  
14 fired.

15       4- 5. Emission and fuel monitoring systems where deemed necessary by the  
16 Director for sources subject to the provisions of this section shall conform  
17 to the requirements of section R9-3-313.

18       5- 6. The applicable reference methods given in the Arizona Testing  
19 Manual shall be used to determine compliance with the standards as prescribed  
20 in paragraphs C.1., and C.2. and C.3. of this section and not by continuous  
21 monitoring. All tests shall be run at the heat input calculated under subsec-  
22 tion B of this section.

23  
24  
25       Part 24. Section R9-3-504, Standards of performance for incinerators, is  
26 amended to read as follows:

1 A. The provisions of this section are applicable to all incinerators  
2 which were existing or for which construction commenced on or before the effec-  
3 tive date of this section.

4 1. Notwithstanding the provisions of section R9-3-501., no person shall  
5 cause, suffer, allow or permit to be emitted into the atmosphere, from any  
6 type of incinerator, smoke, fumes, gases, particulate matter or other gas-borne  
7 material which exceeds 20 percent opacity except during the times specified in  
8 paragraph A.4. of this section.

9 2. No person shall cause, suffer, allow or permit ~~to be emitted~~ the dis-  
10 charge of particulate matter into the atmosphere ~~from any emission point in any~~  
11 one hour from any incinerator, ~~or to pass a convenient measuring point near such~~  
12 ~~emission point, particulate matter of concentrations~~ in excess of the following  
13 limits:

14 a. For multiple chamber incinerators, controlled atmosphere incinerators,  
15 fume incinerators, afterburners or other unspecified types of incinerators,  
16 emissions shall not exceed 0.1 grain per cubic foot, based on dry flue gas at  
17 standard conditions, corrected to 12 percent carbon dioxide.

18 b. For wood waste burners other than air curtain destructors, emissions  
19 discharged from the stack or burner top opening shall not exceed 0.2 grain per  
20 cubic foot, based on dry flue gas at standard conditions, corrected to 12 per-  
21 cent carbon dioxide.

22 c. For air curtain destructors, emissions discharged from the pit opening  
23 shall not exceed 0.5 grain per dry standard cubic foot corrected to 12 percent  
24 carbon dioxide. Air curtain destructors shall not be used within 500 feet of  
25 the nearest dwelling.

26 3. The amount of particulate matter emitted shall be determined by test

1 methods and procedures as stated in subsection C. of this section. Test  
2 methods may be modified, adjusted or added to by the Director to suit specific  
3 sampling conditions or needs and shall be based on good engineering practice,  
4 judgment and experience.

5 4. Incinerators shall be exempt from the above opacity and emission  
6 requirements as follows:

7 a. For multiple chamber incinerators, controlled atmosphere incinerators,  
8 fume incinerators, afterburners or other unspecified types of incinerators, such  
9 exemption shall be for not more than 30 seconds in any 60 minute period.

10 b. Wood waste burners and air curtain destructors shall be exempt as  
11 follows:

12 i. For a period once each day for the purpose of building a new fire but  
13 not to exceed 60 minutes.

14 ii. For an upset of operations not to exceed 3 minutes in any 60 minute  
15 period.

16 B. No change.

17 C. No change.



1 Part 25. Section R9-3-508, Standards of performance for existing  
2 asphalt concrete plants, is amended to read as follows:

3 A. No change.

4 B. Fixed asphalt plants or portable asphalt plants which have  
5 commenced construction or a major alteration on or before the effective  
6 date of this Section shall meet the standards set forth in this Section.  
7 Owner or operator shall submit proof of prior use to the Director.

8 1. No person shall cause, suffer, allow or permit the discharge of  
9 particulate matter into the atmosphere ~~from any emission point~~ in any one  
10 hour from any existing asphalt plant located ~~in any part of the State of~~  
11 ~~Arizona, other than~~ outside of the Phoenix-Tucson Air Quality Control  
12 Region in total quantities in excess of the amounts calculated by the  
13 equations set forth below:

14 a. For process sources having a process weight rate of 60,000 pounds  
15 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
16 be determined by the following equation:

$$17 \quad E = 4.10P^{0.67}$$

18 where:

19 E = the maximum allowable particulate emission rate in pounds-mass per hour.

20 P = the process weight rate in tons-mass per hour.

21 b. For process sources having a process weight rate greater than  
22 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
23 shall be determined by the following equation:

$$24 \quad E = 55.0P^{0.11} - 40$$

25 where "E" and "P" are defined as indicated in subparagraph B.1.a. of this Section.

26 2. No person shall cause, suffer, allow or permit the discharge of

1 particulate matter into the atmosphere ~~from any emission point~~ in any one hour  
2 from any existing asphalt plant located in the Phoenix-Tucson Air Quality  
3 Control Region in total quantities in excess of the amount calculated by the  
4 equations set forth below.

5 a. For process sources having a process weight rate of 60,000 pounds  
6 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
7 be determined by the following equation:

$$E = 3.59P^{0.62}$$

8  
9 where "E" and "P" are defined as indicated in subparagraph B.1.a. of this  
10 Section.

11 ~~E--the maximum allowable particulate emissions rate in pounds mass per~~  
12 ~~hour.~~

13 ~~P--the process weight rate in tons mass per hour.~~

14 b. For process sources having a process weight rate greater than 60,000  
15 pounds per hour (30 tons per hour), the maximum allowable emissions shall  
16 be determined by the following equation:

$$E = 17.31P^{0.16}$$

17  
18 where "E" and "P" are defined as indicated in subparagraph ~~B+2+a~~ B.1.a. of  
19 this Section.

20 3. For reference purposes only, the equations given above are plotted  
21 in Figure 2, Appendix 11. The emission values obtained from the graph are  
22 approximately correct for the process weight rates shown. However, the  
23 actual values shall be calculated from the applicable equations and rounded  
24 off to two decimal places.

25 4. For purposes of this regulation, the total process weight from all  
26 similar units employing a similar type process shall be used in determining

1 the maximum allowable emission of particulate matter.

2 4- 5. Nothing in this regulation shall be construed to prohibit the Direc-  
3 tor from issuing an installation or operating permit for an asphalt plant which  
4 will not operate in compliance with paragraph B.2. of this Section provided that  
5 the plant will operate in compliance with paragraph B.1. of this Section and the  
6 permit contains a condition prohibiting the operating of the plant in the Phoenix-  
7 Tucson Air Quality Control Region.

8 5- 6. The standard for sulfur in fuel under this Section is:

9 a. Liquid fuel containing greater than 0.9 percent sulfur by weight shall  
10 not be utilized for asphalt plants subject to this Section.

11 b. Solid fuel containing greater than 0.5 percent sulfur by weight shall  
12 not be utilized for asphalt plants subject to this Section.

13 c. No change.

14  
15  
16 Part 26. Section R9-3-510, Standards of performance for existing storage  
17 vessels for petroleum liquids, is amended to read as follows:

18 A. Storage vessels under State of Arizona jurisdiction for which construc-  
19 tion or major alteration was commenced on or before the effective date of this  
20 Section shall meet the following standards:

21 1. No person shall place, store or hold in any reservoir, stationary tank or  
22 other container having a capacity of ~~65,000-(245,000-liters)~~ 40,000 (151,400 liters)  
23 or more gallons any petroleum liquid having a vapor pressure of ~~2-9~~ 1.5 pounds per  
24 square inch absolute or greater under actual storage conditions, unless such tank,  
25 reservoir or other container is a pressure tank maintaining working pressure suffi-  
26 cient at all times to prevent hydrocarbon vapor loss control devices, properly  
installed, in good working order and in operation:

1 a. A floating roof consisting of a pontoon type double-deck type roof  
2 resting on the surface of the liquid contents and equipped with a closure  
3 seal to close the space between the roof eave and tank well, a vapor  
4 balloon or vapor dome, designed in accordance with accepted standards of the  
5 petroleum industry. The control equipment shall not be used if the petroleum  
6 liquid has a vapor pressure of 12 pounds per square inch absolute or  
7 greater under actual storage conditions. All tank gauging and sampling  
8 devices shall be gas-tight except when gauging or sampling is taking place.

9 b. There shall be no visible holes, tears, or other openings in the  
10 seal or any seal fabric. Where applicable, all openings except drains shall  
11 be equipped with a cover, seal, or lid. The cover, seal, or lid shall be in a  
12 closed position at all times, except when the device is in actual use. Auto-  
13 matic bleeder vents shall be closed at all times, except when the roof is  
14 floated off or landed on the roof leg supports. Rim vents, if provided,  
15 shall be set to open when the roof is being floated off the roof leg supports,  
16 or at the manufacturer's recommended setting.

17 ~~b.~~ c. Other equipment proven to be of equal efficiency for prevent-  
18 ing discharge of hydrocarbon gases and vapors to the atmosphere.

19 2. Any other petroleum liquid storage tank shall be equipped with a  
20 submerged filling device or acceptable equivalent for the control of hydro-  
21 carbon emissions.

22 B. No change.

23 C. No change.

24 D. No change.

25 E. No change.

26

1  
2  
3 Part 27. Section R9-3-511, Standards of performance for existing  
4 secondary lead smelters, is amended to read as follows:

5 A. This Section shall be applicable to all secondary lead smelters for  
6 which major alteration or construction was commenced on or before the ef-  
7 fective date of this Section.

8 1. No person shall cause, suffer, allow or permit the discharge of  
9 particulate matter into the atmosphere ~~from any emission point~~ in any one  
10 hour ~~from any existing secondary lead smelter subject to the provisions~~  
11 ~~of this section,~~ outside of the Phoenix-Tucson Air Quality Control Region,  
12 in total quantities in excess of the amounts calculated by the equations set  
13 forth below.

14 a. For process sources having a process weight rate of 60,000 pounds  
15 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
16 be determined by the following equation:

17 ~~E = 3.59P<sup>0.62</sup>~~ E = 4.10P<sup>0.67</sup>

18 where:

19 E = the maximum allowable emission rate in pounds-mass per hour.

20 P = the process weight rate in tons-mass per hour.

21 b. For process sources having a process weight rate greater than  
22 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
23 shall be determined by the following equation:

24 ~~E = 17.31P<sup>0.16</sup>~~ E = 55.0P<sup>0.11</sup> - 40

25 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
26 Section.

1        2. No person shall cause, suffer, allow or permit the discharge of  
2        particulate matter into the atmosphere in any one hour from any existing  
3        secondary lead smelter located in the Phoenix-Tucson Air Quality Control  
4        Region in total quantities in excess of the amount calculated by the  
5        equations set forth below.

6        a. For process sources having a process weight rate of 60,000 pounds  
7        per hour (30 tons per hour) or less, the maximum allowable emissions shall  
8        be determined by the following equation:

$$E = 3.59p^{0.62}$$

9  
10       where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
11       Section.

12       b. For process industries having a process weight rate greater than  
13       60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
14       shall be determined by the following equation:

$$E = 17.31p^{0.16}$$

15  
16       where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
17       Section.

18       2. 3. For reference purposes only, the equations in subparagraphs  
19       A.1.a. and A.1.b. A.2 are plotted in Figure 2, Appendix 11. The emission  
20       values obtained from the graph are approximately correct for the process  
21       weight rates shown. However, the actual values shall be calculated from  
22       the applicable equations and rounded off to two decimal places.

23       4. For purposes of this regulation, the total process weight from all  
24       similar units employing a similar type process shall be used in determining  
25       the maximum allowable emission of particulate matter.

26       3. 5. The opacity of emissions subject to the provisions of this Section

1 shall not exceed 20 percent.

2 B. No change.

3  
4  
5 Part 28. Section R9-3-512, Standards of performance for existing  
6 secondary brass and bronze ingot production plants, is amended to read as  
7 follows:

8 A. The standards set forth in this Section are applicable to all  
9 secondary brass and bronze ingot production plants which are existing or for  
10 which major alteration or construction commenced on or before the effective  
11 date of this Section.

12 1. No person shall cause, suffer, allow or permit the discharge of  
13 particulate matter into the atmosphere ~~from any emission point~~ in any one  
14 hour from any secondary brass or bronze ingot production plant ~~subject to the~~  
15 ~~provisions of this section~~ outside of the Phoenix-Tucson Air Quality Control  
16 Region in total quantities in excess of the amount calculated by the equations  
17 set forth below.

18 a. For process sources having a process weight rate of 60,000 pounds  
19 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
20 be determined by the following equation:

21 
$$E = 3.59P^{0.62} \quad E = 4.10P^{0.67}$$

22 where:

23 E = the maximum allowable particulate emissions rate in pounds-mass per hour.

24 P = the process weight rate in tons-mass per hour.

25 b. For process sources having a process weight rate greater than 60,000  
26 pounds per hour (30 tons per hour), the maximum allowable emissions shall be

1 determined by the following equation:

$$2 \quad E = 17.31P^{0.16} \quad E = 55.0P^{0.11} - 40$$

3 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
4 Section.

5 2. No person shall cause, suffer, allow or permit the discharge of par-  
6 ticulate matter into the atmosphere in any one hour from any secondary brass  
7 or bronze ingot production plant located in the Phoenix-Tucson Air Quality  
8 Control Region in total quantities in excess of the amount calculated by the  
9 equations set forth below.

$$10 \quad E = 3.59P^{0.62}$$

11 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

12 b. For process industries having a process weight rate greater than  
13 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall  
14 be determined by the following equation:

$$15 \quad E = 17.31P^{0.16}$$

16 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

17 3. For reference purposes only, the equations in subparagraphs A.1.a.  
18 and A.1.b. A.2. are plotted in Figure 2, Appendix 11. The emission values ob-  
19 tained from the graph are approximately correct for the process weight rates  
20 shown. However, the actual values shall be calculated from the applicable  
21 equations and rounded off to two decimal places.

22 4. For purposes of this regulation, the total process weight from all  
23 similar units employing a similar type process shall be used in determining  
24 the maximum allowable emission of particulate matter.

25 5. The opacity of emissions subject to the provisions of this Section  
26 shall not exceed 20 percent.



B. No change.

Part 29. Section R9-3-513, Standards of performance for existing iron and steel plants, is amended to read as follows:

A. The standards set forth in this Section are applicable to basic oxygen process furnaces under State of Arizona jurisdiction which are existing or for which major alteration or construction was commenced on or before the effective date of this Section.

1. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere ~~from any emission point~~ in any one hour from any basic oxygen process furnace ~~subject to the provisions of this Section~~ outside of the Phoenix-Tucson Air Quality Control Region in total quantities in excess of the amount calculated by the equations set forth below.

a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$\cancel{E = 3.59P^{0.62}} \quad E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$\cancel{E = 17.31P^{0.16}} \quad E = 55.0P^{0.11} - 40$$

1 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
2 Section.

3 2. No person shall cause, suffer, allow or permit the discharge of  
4 particulate matter into the atmosphere in any one hour from any (unclassified)  
5 process source located in the Phoenix-Tucson Air Quality Control Region in  
6 total quantities in excess of the amount calculated by the equations set forth  
7 below.

8 a. For process sources having a process weight rate of 60,000 pounds  
9 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
10 be determined by the following equation:

$$11 \quad E = 3.59P^{0.62}$$

12 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
13 Section.

14 b. For process industries having a process weight rate greater than  
15 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
16 shall be determined by the following equation:

$$17 \quad E = 17.31P^{0.16}$$

18 where "E" and "P" are defined as indicated in A.1.a. of this Section.

19 2- 3. For reference purposes only, the equations in subparagraphs A.1.a-  
20 and A.1.b- A.2 are plotted in Figure 2, Appendix 11. The emission values ob-  
21 tained from the graph are approximately correct for the process weight rates  
22 shown. However, the actual values shall be calculated from the applicable  
23 equations and rounded off to two decimal places.

24 4. For purposes of this regulation, the total process weight from all  
25 similar units employing a similar type process shall be used in determining  
26 the maximum allowable emission of particulate matter.

1 3- 5. The opacity of emissions subject to the provisions of this Section  
2 shall not exceed 20 percent.

3 B. No change.

4 C. No change.

5  
6  
7 Part 30. Section R9-3-514, Standards of performance for existing sewage  
8 treatment plants, is amended to read as follows:

9 A. The provisions of this Section are applicable to all municipal  
10 sewage treatment plant sludge incinerators of any size which were existing  
11 or for which major alteration or construction commenced on or before the ef-  
12 fective date of this Section.

13 1. Notwithstanding the provisions of Section R9-3-501., no person shall  
14 cause, suffer, allow or permit to be emitted into the atmosphere, from any  
15 sewage sludge incinerator subject to the provisions of this Section, smoke,  
16 fumes, gases, particulate matter or other gas-borne material which exceeds  
17 20 percent <sup>OPACITY</sup> for more than 30 seconds in any 60-minute period.

18 2. No person shall cause, suffer, allow or permit to be emitted into  
19 the atmosphere ~~from any emission point~~ from any sewage sludge incinerator  
20 subject to the provisions of this Section ~~or to pass a convenient measuring~~  
21 ~~point near such emission point~~, particulate matter in concentrations in ex-  
22 cess of 0.1 grain per cubic foot, based on dry flue gas at standard conditions,  
23 corrected to 12 percent carbon dioxide.

24 B. No change.

25 C. No change.

1  
2 Part 31. Section R-9-3-515, Standards of performance for existing  
3 primary copper smelters, is amended to read as follows:

4 A. The provisions of this Section are applicable to any primary copper  
5 smelter within the State of Arizona which was existing or for which major  
6 alteration or construction was commenced on or before the effective date  
7 of this Section.

8 1. Application of subsection A. of R9-3-502. shall be stayed with regard to  
9 existing copper smelters for a period ending ~~July-1,-1979.~~ December 31, 1979.

10 2. No change.

11 3. No change.

12 4. No change.

13 5. No change.

14 6. No change.

15 7. No change.

16 8. No change.

17 9. No change.

18 10. No change.

19  
20  
21 Part 32. Section R9-3-516, Standards of performance for existing coal  
22 preparation plants, is amended to read as follows:

23 A. The provisions of this Section are applicable to any of the following  
24 affected facilities in any existing coal preparation plant: Thermal dryers,  
25 pneumatic coal-cleaning equipment (air tables), coal processing and conveying  
26 equipment (including breakers and crushers), coal storage systems, and coal

1 transfer and loading systems. This Section is applicable to any coal prep-  
2 aration plant for which construction or major alteration commenced on or  
3 before the effective date of this Section. For purposes of this Section,  
4 the definitions contained in 40 CFR 60.251 are adopted by reference and  
5 incorporated herein.

6 1. No person shall cause, suffer, allow or permit the discharge of  
7 particulate matter into the atmosphere ~~from any emission point~~ in any one  
8 hour from any existing coal preparation plant located outside of the Phoenix-  
9 Tucson Air Quality Control Region, in total quantities in excess of the  
10 amounts calculated by the equations set forth below:

11 a. For process sources having a process weight rate of 60,000 pounds  
12 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
13 be determined by the following equation:

$$E = 4.10P^{0.67}$$

14  
15 where:

16 E = the maximum allowable particulate emissions rate in pounds-mass  
17 per hour.

18 P = the process weight rate in tons-mass per hour.

19 b. For process sources having a process weight rate greater than 60,000  
20 pounds per hour (30 tons per hour), the maximum allowable emissions shall be  
21 determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

22 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

23 2. No person shall cause, suffer, allow or permit the discharge of par-  
24 ticulate matter into the atmosphere ~~from any emission point~~ in any one hour  
25 from any existing coal preparation plant located in the Phoenix-Tucson Air  
26

1 Quality Control Region, in total quantities in excess of the amount cal-  
2 culated by the equations set forth below.

3 a. For process sources having a process weight rate of 60,000 pounds  
4 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
5 be determined by the following equation:

$$6 \quad E = 3.59p^{0.62}$$

7 where:

8 E = maximum allowable particulate emissions rate in pounds-mass per  
9 hour.

10 P = the process weight rate in tons-mass per hour.

11 b. For process sources having a process weight rate greater than  
12 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
13 shall be determined by the following equation:

$$14 \quad E = 17.31p^{0.16}$$

15 where "E" and "P" are defined as indicated in subparagraph A.2.a. of this  
16 Section.

17 3. For reference purposes only, the equations in paragraphs A.1. and  
18 A.2. of this Section are plotted in Figure 2, Appendix 11. The emission values  
19 obtained from the graph are approximately correct for the process weight rates  
20 shown. However, the actual values shall be calculated from the applicable  
21 equations and rounded off to two decimal places.

22 4. For purposes of this regulation, the total process weight from all  
23 similar units employing a similar type process shall be used in determining  
24 the maximum allowable emission of particulate matter.

25 4. 5. The opacity of any emission subject to the provisions of this  
26 Section shall not exceed 40 percent.

5. 6. Fugitive emissions from coal preparation plants shall be controlled in accordance with R9-3-404. through R9-3-407.

B. No change.

Part 33. Section R9-3-517, Standards of performance for steel plants: existing electric arc furnaces (EAF), is amended to read as follows:

A. The provisions of this Section are applicable to the following affected facilities in steel plants: Electric arc furnaces and dust-handling equipment, for which construction or major alteration commenced on or before the effective date of this Section.

1. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere ~~from any emission point~~ in any one hour from any steel plant located outside of the Phoenix-Tucson Air Quality Control Region in total quantities in excess of the amount calculated by the equations set forth below:

a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 3.59P^{0.62} \quad E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be

1 determined by the following equation:

$$2 \quad E = -17.31P^{0.16} \quad E = 55.0P^{0.11} - 40$$

3 where "E" and "P" are defined as indicated in subparagraph A.1.a above of this  
4 Section.

5 2. No person shall cause, suffer, allow or permit the discharge of  
6 particulate matter into the atmosphere in any one hour from any steel plant  
7 source located in the Phoenix-Tucson Air Quality Control Region in total  
8 quantities in excess of the amount calculated by the equations set forth be-  
9 low.

10 a. For process sources having a process weight rate of 60,000 pounds  
11 per hour (30 tons per hour) or less, the maximum allowable emissions shall  
12 be determined by the following equation:

$$13 \quad E = 3.59P^{0.62}$$

14 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this  
15 Section.

16 b. For process industries having a process weight rate greater than  
17 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions  
18 shall be determined by the following equation:

$$19 \quad E = 17.31P^{0.16}$$

20 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

21 2. 3. For reference purposes only, the equations given above are plotted  
22 in Appendix 11, Figure 2. The emission values obtained from the graph are  
23 approximately correct for the process weight rates shown. However, the actual  
24 values shall be calculated from the applicable equations and rounded off to  
25 two decimal places.

26 4. For purposes of this regulation, the total process weight from all



1 similar units employing a similar type process shall be used in determining  
2 the maximum allowable emission of particulate matter.

3 3\* 5. An opacity standard of forty percent shall not be exceeded by  
4 existing steel plant electric arc furnaces and thier appurtenances for more  
5 than an aggregate of three minutes in any forty-five minute period.

6 B. No change.

7 C. No change.

8  
9  
10 Part 34. Section R9-3-518, Standards of performance for existing kraft  
11 pulp mills is amended to read as follows:

12 A. The provisions of this Section are applicable to the following  
13 affected facilities in kraft pulp mills: digester system, brown stock wash-  
14 er system, multiple-effect evaporator system, black liquor oxidation system,  
15 recovery furnace, smelt dissolving tank, lime kiln, and condensate stripper  
16 system. In pulp mills in which kraft pulping is combined with neutral  
17 sulfite semichemical pulping, the provisions of this Section are applicable  
18 when any portion of the material charged to an affected facility is pro-  
19 duced by the kraft pulping operation. The provisions of this Section are  
20 applicable only to kraft pulp mills for which construction or major altera-  
21 tion commenced on or before the effective date of this Section.

22 ~~1.---The standards for particulate matter under this Section are:~~

23 a\* 1. No person shall cause, suffer, allow or permit the discharge of  
24 particulate matter into the atmosphere ~~from any emission point~~ in any one hour  
25 from any kraft pulp mill process source located outside of the Phoenix-Tucson  
26 Air Quality Control Region in total quantities in excess of the amounts cal-

culated by the equations set forth below:

a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where "E" and "P" are defined in ~~subdivision~~ subparagraph A.1.a.i- of this Section.

2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any kraft pulp mill located in the Phoenix-Tucson Air Quality Control Region in total quantities in excess of the amount calculated by the equations set forth below.

a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 3.59P^{0.62}$$

where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

b. For process industries having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be

1 determined by the following equation:

$$2 \quad E = 17.31P^{0.16}$$

3 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

4     b+ 3. For reference purposes only, the equations set forth above are  
5 plotted in Appendix 11, Figure 2. The emission values obtained from the graph  
6 are approximately correct for the process weight rates shown. However, the  
7 actual values shall be calculated from the applicable equations and rounded off  
8 to two decimal places.

9     4. For purposes of this regulation, the total process weight from all  
10 similar units employing a similar type process shall be used in determining the  
11 maximum allowable emission of particulate matter.

12     e+ 5. No person shall cause, suffer, allow or permit to be emitted to  
13 the atmosphere from any affected facility under this Section, smoke or other  
14 emission which exceeds 40 percent opacity.

15     B. No change.

16     C. No change.

17  
18  
19     Part 35. Section R9-3-520, Standards of performance for existing lime  
20 manufacturing plants, is amended to read as follows:

21     A. The provisions of this Section are applicable to the following affected  
22 facilities used in the manufacture of lime: rotary lime kilns, lime hydrators,  
23 and limestone crushing facilities for which construction or major alteration  
24 was commenced on or before the effective date of this Section. This Section  
25 is also applicable to limestone crushing equipment which exists apart from other  
26 lime manufacturing facilities.

1. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere ~~from any emission point~~ in any one hour from any lime manufacturing or limestone crushing facility located outside of the Phoenix-Tucson Air Quality Control Region in total quantities in excess of the amounts calculated by the equations set forth below:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

~~E--the maximum allowable particulate emissions rate in pounds-mass per hour.~~

~~P--the process weight rate in tons-mass per hour.~~

2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere ~~from any emission point~~ in any one hour from any lime manufacturing or limestone crushing facility located within the Phoenix-Tucson Air Quality Control Region in total quantities in excess of the amount calculated by the equations set forth below:

a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be deter-

1 mined by the following equation:

$$E = 3.59p^{0.62}$$

2  
3 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

4 ~~E--the maximum allowable particulate emissions rate in pounds mass per hour.~~

5 ~~P--the process weight rate in tons mass per hour.~~

6 b. For process industries having a process weight rate greater than  
7 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall  
8 be determined by the following equation:

$$E = 17.31p^{0.16}$$

9  
10 where "E" and "P" are defined as indicated in subparagraph ~~A-2-a-~~ A.1.a. of this  
11 Section.

12 3. For reference purposes only, the equations in Paragraphs A.1. and A.2.  
13 of this Section are plotted in Appendix 11, Figure 2. The emission values ob-  
14 tained from the graph are approximately correct for the process weight rates  
15 shown. However, the actual values shall be calculated from the applicable equa-  
16 tions and rounded off to two decimal places.

17 4. For purposes of this regulation, the total process weight from all  
18 similar units employing a similar type process shall be used in determining  
19 the maximum allowable emission of particulate matter.

20 ~~4~~ 5. Notwithstanding the provisions of R9-3-501., no person shall cause,  
21 suffer, allow or permit to be emitted into the atmosphere from any lime manu-  
22 facturing or limestone crushing facility smoke or dust which exceeds 40 percent  
23 opacity.

24 ~~5~~ 6. Fugitive emissions from lime manufacturing plants shall be con-  
25 trolled in accordance with R9-3-404. through R9-3-407.

26 B. No change.

1 C. No change.  
2  
3

4 Part 36. Section R9-3-521, Standards of performance for existing non-  
5 ferrous metals industry sources, is amended to read as follows:

6 A. The provisions of this Section are applicable to the following af-  
7 fected facilities: mines, mills, concentrators, crushers, screens, material  
8 handling facilities, fine ore storage, dryers, roasters, and loaders which  
9 have commenced construction or major alteration prior to the effective date of  
10 this Section.

11 1. No person shall cause, suffer, allow or permit the discharge of par-  
12 ticulate matter into the atmosphere ~~from any emission point~~ in any one hour  
13 from any process source subject to the provisions of this Section and outside  
14 of the Phoenix-Tucson Air Quality Control Region, in total quantities in ex-  
15 cess of the amounts calculated by the equations set forth below:

16 a. For process sources having a process weight rate of 60,000 pounds  
17 per hour (30 tons per hour) or less, the maximum allowable emissions shall be  
18 determined by the following equation:

19 
$$E = 4.10P^{0.67}$$

20 where:

21 E = the maximum allowable particulate emissions rate in pounds-mass per hour.

22 P = the process weight rate in tons-mass per hour.

23 b. For process sources having a process weight greater than 60,000 pounds  
24 per hour (30 tons per hour), the maximum allowable emissions shall be determined  
25 by the following equation:

26 
$$E = 55.0P^{0.11} - 40$$

1 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

2 2. No person shall cause, suffer, allow or permit the discharge of parti-  
3 culate matter into the atmosphere ~~from any emission point~~ in any one hour from  
4 any mining property process source located in the Phoenix-Tucson Air Quality  
5 Control Region except smelters, in total quantities in excess the amount cal-  
6 culated by the equations set forth below:

7 a. For process sources having a process weight rate of 60,000 pounds per  
8 hour (30 tons per hour) or less, the maximum allowable emissions shall be deter-  
9 mined by the following equation:

$$10 \quad E = 3.59P^{0.62}$$

11 where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Sec-  
12 tion.

13 ~~E--the maximum allowable particulate emissions rate in pounds mass per hour.~~

14 ~~P--the process weight rate in tons mass per hour.~~

15 b. For process sources having a process weight rate greater than 60,000  
16 pounds per hour (30 tons per hour) or less, the maximum allowable emissions  
17 shall be determined by the following equation:

$$18 \quad E = 17.31P^{0.16}$$

19 where "E" and "P" are defined as indicated in subparagraph ~~A.2.a.~~ A.1.a. of this  
20 Section.

21 3. For reference purposes only, the equations in paragraphs A.1. and  
22 A.2. of this Section are plotted in Appendix 11, Figure 2. The emission values  
23 obtained from the graph are approximately correct for the process weight rates  
24 shown. However, the actual values shall be calculated from the applicable  
25 equations and rounded off to two decimal places.

26 4. ~~Mining properties subject to the provisions of this Section shall~~

~~control-fugitive-dust-in-accordance-with-Sections-R9-3-404--through-R9-3-408.~~

4. For purposes of this regulation, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

5. No person shall cause, suffer, allow or permit the discharge of any emissions from any mining property process or non-point source subject to the provisions of this Section, dust or smoke that exceeds 40 percent opacity.

B. No change.

C. No change.

D. No change.

Part 37. Section R9-3-602, Off-road machinery is amended to read as follows:

A. No change.

B. No change.

~~6.--Off-road-machinery-shall-conform-to-the-regulations-for-fugitive-dust emissions-contained-in-Sections-R9-3-404-through-R9-3-407.~~

Part 38. Section R9-3-801, General, is amended to read:

A. Subpart A. of Part 60, Title 40 of the Code of Federal Regulations along with all duly promulgated revisions as of the date of adoption of these Rules and Regulations is herewith adopted by reference except as follows:

1. "Administrator" shall in this article be taken to mean the Director of the Arizona Department of Health Services.



1           2. Delete Sections 60.4, 60.5, and 60.6.

2           3. Delete Section 60.8 and substitute the requirements of R9-3-312.

1 Part 39. Appendix 1 to the Arizona State Rules and Regulations for Air Pollution  
2 Control is repealed and a new Appendix 1 is added as follows:

3  
4 APPENDIX 1

5 FILING INSTRUCTIONS FOR INSTALLATION PERMIT APPLICATION

6 A1.1. Applications for installation permits required by A.R.S. § 36-1707.01.A.  
7 and R9-3-301. shall be filed in accordance with these instructions.

8 A1.2. All installation permit applications shall be prepared in duplicate and  
9 filed with the Bureau of Air Quality Control, 1740 West Adams Street, Phoenix,  
10 Arizona, 85007.

11 A1.3. No permit application shall be considered properly filed until the Director  
12 has determined that all information required by this appendix and the applicable  
13 statutes and regulations has been submitted.

14 A1.4. There are two classes of installation permits.

15 A1.4.1. Class A permits are issued to persons proposing to commence construction  
16 of a new major source or a major alteration (including any air pollution control  
17 equipment incident thereto).

18 A1.4.2. Class B installation permits are issued for each major air pollution  
19 control device and all appurtenances and accessories thereto.

20 A1.4.3. Where more than a single article, machine, equipment item, etc., is  
21 to be covered by a single permit, each such article, equipment item, etc.,  
22 must be listed in the permit request.

23 A1.5. General Application. Applicants for either a Class A or Class B  
24 installation permit shall complete an application on a form to be supplied  
25 by the Bureau of Air Quality Control. The application form shall require, at  
26 a minimum, that the applicant supply the following information:

- 1 A1.5.1. The name to which the license is to be issued (usually the name on the  
2 business license of the organization or individual applying for the license).
- 3 A1.5.2. The name or names of the owner, principals or, if a corporation, the  
4 statutory agent, of the applicant.
- 5 A1.5.3. The mailing address of the applicant.
- 6 A1.5.4. The proposed location of the source or equipment for which a permit is  
7 sought. The location should be described in either a legal description or map  
8 coordinates.
- 9 A1.5.5. The type of organization of the application (corporation, governmental  
10 entity, etc.).
- 11 A1.5.6. The basis for the application (new major source, major alteration of  
12 existing, air pollution control equipment, etc.).
- 13 A1.5.7. Attainment status by pollutant of the area in which the source or  
14 equipment is proposed to be located. If the area is classified as attainment  
15 for sulfur dioxide and/or particulates, the class designation of the area  
16 shall also be specified.
- 17 A1.5.8. A general description of the nature of the applicant's business.
- 18 A1.5.9. A general description of the source or equipment to be permitted. If  
19 a permit is sought for a major alteration to an existing source, this descrip-  
20 tion should note the operating permit number of the source being altered.
- 21 A1.5.10. If the applicant is installing air pollution control devices for  
22 which it will apply for certification pursuant to Section 43-123.02.C. of the  
23 Arizona Revised Statutes, the applicant should so indicate on the application  
24 form.
- 25 A1.6. Class A Installation Permit--Regulatory compliance plan, data and informa-  
26 tion.

1 An applicant for a Class A installation permit shall supply such information  
2 as is necessary to demonstrate compliance with the applicable requirements of  
3 R9-3-301. through R9-3-305. Such information shall include the following:

4 A1.6.1. A demonstration that the increase in the amounts of emission of any  
5 pollutant for which the source is classified as a major source caused by the  
6 operation or major alteration for which the permit is sought will not result  
7 in exceedances of the significance levels for that pollutant in any area of  
8 another state in which either:

9 a. Any national primary or secondary ambient air quality standard is violated,  
10 or

11 b. Any prevention of significant deterioration pollutant increment in classi-  
12 fied attainment areas is violated.

13 A1.6.2. A demonstration that the new major source or existing source after com-  
14 pletion of the major alteration will not exceed the applicable standards for  
15 hazardous air pollutants contained in Article 9.

16 A1.6.3. A demonstration that the new major source or existing source, after  
17 completion of the major alteration, will not exceed the limitations, if appli-  
18 cable, on emissions from non-point sources contained in Article 4.

19 A1.6.4. A demonstration that the applicant has provided written notice of the  
20 permit application to the agency having cognizance over major source construc-  
21 tion permits in all nearby states, the air pollution levels of which may be  
22 affected by the new major source or major alteration above the concentrations  
23 specified in R9-3-301.E.

24 A1.6.5. If under R9-3-301.F. (no net increase in emissions) the new source or  
25 major alteration will be exempt from the requirements of Sections R9-3-302.  
26 through R9-3-305., the applicant must demonstrate the manner in which the

1 requirements of R9-3-301.F. will be met by the new major source or major  
2 alteration.

3 A1.6.6. A demonstration of the manner in which a new major source or major  
4 alteration which will be located in a nonattainment area for a pollutant for  
5 which the source is classified as a major source or the alteration is classi-  
6 fied as a major alteration will meet the requirements of R9-3-302.

7 A1.6.6.1. In the case of a new major source or major alteration subject to an  
8 emission limitation which is LAER for that source or facility, the application  
9 shall contain a determination of LAER that is consistent with the requirements  
10 of the definition of LAER contained in R9-3-301. The demonstration shall con-  
11 tain the data and information relied upon by the applicant in determining the  
12 emission limitation that is LAER for the source or facility for which an  
13 operating permit is sought.

14 A1.6.6.2. In the case of a new major source or major alteration subject to the  
15 certification requirement of R9-3-302.A.2., the applicant shall submit such  
16 certification in a form that lists and describes all existing major sources  
17 owned or operated by the applicant and a statement of compliance with all con-  
18 ditions contained in the operating or conditional permits of each of the sources.

19 A1.6.6.3. In the case of a new major source or major alteration subject to the  
20 offset requirements described in R9-3-302.A.3., the applicant shall demonstrate  
21 the manner in which the new major source or major alteration meets the require-  
22 ments of R9-3-303. (offset section).

23 A1.6.6.4. Unless otherwise exempt under R9-3-302.C., the applicant shall demon-  
24 strate compliance with the requirements of R9-3-302.A.4. (exceedance of baseline  
25 concentration).

26 A1.6.6.5. An applicant for a new major source or major alteration for volatile

1 organic compounds or carbon monoxide (or both) which will be located in a  
2 nonattainment area for photochemical oxidants or carbon monoxide (or both)  
3 shall submit the analysis described in R9-3-302.8.

4 A1.6.6.6. If an applicant seeks an exemption from any or all of the require-  
5 ments of R9-3-302.A. under the provisions of subsections C. through J. of  
6 R9-3-302., the applicant shall provide sufficient information and data in the  
7 application to demonstrate compliance with the requirements of the subsection(s)  
8 under which an exemption is sought. If the applicant seeks an exemption under  
9 subsections D. or I., the applicant need not submit the data and information  
10 necessary to comply with the requirements of R9-3-304. and R9-3-305. until  
11 such time as the Director has determined that the new major source or major  
12 alteration has submitted sufficient information to qualify for an exemption  
13 under subsections D. or I.

14 A1.6.6.7. A demonstration of the manner in which a new major source or major  
15 alteration which will be located in an attainment area for a pollutant for  
16 which the source is classified as a major source or the alteration is classi-  
17 fied as a major alteration will meet the requirements of R9-3-304.

18 A1.6.7.1. In the case of a new major source or major alteration subject to an  
19 emission limitation which is BACT for that source or facility, the application  
20 shall contain a determination of BACT that is consistent with the requirements  
21 of the definition of BACT contained in R9-3-304.A. The demonstration shall  
22 contain the data and information relied upon by the applicant in determining  
23 the emission limitation that is BACT for the source or facility for which an  
24 operating permit is sought.

25 A1.6.7.2. In the case of a new major source or major alteration required to  
26 perform and submit an air impact analysis in the form prescribed in R9-3-305.,

1 such an analysis shall meet the requirements of R9-3-304.A.2. Unless other-  
2 wise exempted in writing by the Director, the air impact analysis shall  
3 include all of the information and data specified in R9-3-305.

4 A1.6.7.3. If an applicant seeks an exemption from any or all of the require-  
5 ments of R9-3-304.A. under the provisions of subsections B. through F. of  
6 R9-3-304., the applicant shall provide sufficient information and data in the  
7 application to demonstrate compliance with the requirements of the subsection(s)  
8 under which an exemption is sought.

9 A1.7. Class A Installation Permit--Source or Facility Description

10 A1.7.1 In addition to the information required to be submitted by A1.5. and  
11 A1.6. above, an applicant for an installation permit for a new major mobile or  
12 portable source or a major alteration to an existing mobile or portable source,  
13 shall submit the following information (unless otherwise indicated, the  
14 required information for a major alteration to an existing mobile or  
15 portable source shall be limited only to the facility being added or altered  
16 and not the remainder of the source):

17 A1.7.1.1. An operating schedule stating the process feed weight in tons per  
18 hour and the days of the week equipment is normally in operation.

19 A1.7.1.2. A brief sketch of equipment layout showing property lines, adjacent  
20 streets or roads and directional arrow.

21 A1.7.1.3. A description of all basic and control equipment for which permits  
22 are required. Include the name, make, size and type. Equipment manufacturers'  
23 bulletins and shop drawings are acceptable. Information submitted must include  
24 the following:

25 A1.7.1.4. Exterior and interior dimensions of control equipment, ductwork, etc.

1 A1.7.1.5. Size and location of all emission points.

2 A1.7.1.6. Height and inside dimensions of all stacks.

3 A1.7.1.7. Dimensions and characteristics of all fans and pumps, including  
4 flow rate, temperature, total net discharge head or static pressure,  
5 rated horsepower and RPM.

6 A1.7.1.8. The rated and operating efficiency of air pollution control equipment.

7 The total quantity of gases exhausted to the atmosphere and the emissions of  
8 air pollutants to the atmosphere. The temperature and the barometric pressure  
9 shall be given for all gas flows. Where spray nozzles are used as control  
10 devices, pressure drop, water requirements in gallons per minute per nozzle,  
11 location and direction of spray shall be shown.

12 A1.7.1.9 A description of the processes to be carried out in each unit of  
13 equipment. All process materials used must be stated and the maximum  
14 hourly quantities used must be given. A sieve analysis of all bulk solids  
15 or aggregate must be listed. Gravel pit location and identification must  
16 be clearly shown. Source, quantity and method of water supply to water-using  
17 pollution control equipment must be indicated.

18 A1.7.1.10. A description of fuel use, including the type used, the maximum and  
19 average quantity used per hour, and higher heating value of the fuel. For  
20 solid fuels and fuel oils, state the sulfur and ash content. Furnish  
21 description of fuel-burning equipment.

22 A1.7.2. In addition to the information required to be submitted by A1.5. and A1.6.  
23 above, an applicant for an installation permit for a new major stationary source  
24 or a major alteration to an existing stationary source shall submit the  
25 following information (unless otherwise indicated, the required information  
26 for a major alteration to an existing stationary source shall be limited



1 to the facility being added or altered and not the remainder of the source):

2 A1.7.2.1. An operating schedule stating the percent of annual production by  
3 season, the days of the week normally in operation, the shifts or hours of  
4 the day normally in operation, and the number of days per year in operation.

5 A1.7.2.2. Equipment location drawings showing building outlines, property lines,  
6 adjoining streets, directional arrow, and identification of basic operating or  
7 control equipment installations with respect to buildings and property lines.

8 A1.7.2.3. A description of all basic operating and control equipment for which  
9 permits are required. Include the name, make, size and type of equipment.

10 The following must also be included:

11 A1.7.2.3.1. Interior and exterior dimensions.

12 A1.7.2.3.2. Size and location of all emission points.

13 A1.7.2.3.3. Height and inside dimensions of all stacks.

14 A1.7.2.3.4. Location of all cleanouts, grates, doors, controls, fans, motors,  
15 ducts, hoods, and all parts or other equipment which may influence the production,  
16 collection or control of air contaminants.

17 A1.7.2.3.5. Dimensions and operating characteristics of all pumps, fans, com-  
18 pressors or other fluid moving devices giving flow rate, temperature, baro-  
19 metric pressure, total net discharge head or static pressure, revolutions per  
20 minute, and rated horsepower.

21 A1.7.2.3.6. Heat transfer capacities and operating characteristics of all heat  
22 exchange devices which may influence the production, collection, or control of  
23 air contaminants.

24 A1.7.3.2.7. The rated and operating efficiency of air pollution control equip-  
25 ment. The total quantity of gases exhausted to the atmosphere along with  
26 their temperature and barometric pressure should be given. The emissions of

1 air pollutants to the atmosphere from each unit of basic operating and control  
2 equipment should be stated. The method used to calculate the emissions should  
3 be described. Where water sprays are utilized as a control or cooling device,  
4 pressure drop, water requirements in gallons per minute per nozzle, location,  
5 and direction of spray shall be shown.

6 A1.7.2.3.8. A description of the processes to be carried out in each unit of  
7 equipment. All materials used must be stated and the maximum hourly and  
8 average annual quantities used must be given. The particle size distribution  
9 of all bulk solids must be listed. Flow diagrams and material balances for  
10 all process and waste materials must be clearly shown.

11 A1.7.2.3.9. A description of fuel use, including the type used, the quantity  
12 used per year, the maximum and average quantity used per hours, the percent  
13 used for space heating and percent used for process heat, and higher heating  
14 value of the fuel. For solid fuels and fuel oils, state the sulfur and ash  
15 content. Furnish description of fuel-burning equipment.

16 A1.7.2.3.10. The manufacturers' catalog designating specific standard com-  
17 mercial equipment may be submitted in lieu of items A1.7.2.3. through  
18 A1.7.2.3.7. provided that the information in the catalog is equivalent to  
19 the requirements of these items. Structural details are not required.

#### 20 A1.8. Class B Installation Permit--Equipment Description

21 In addition to the information required to be submitted in A1.1., the appli-  
22 cant for a Class B installation permit shall submit the following information:

23 A1.8.1. A brief sketch of equipment layout showing relationship to buildings,  
24 property lines, adjacent streets or roads and directional arrow.

25 A1.8.2. A description of all air pollution control equipment for which permits

1 are required. Include the name, make, size and type. Equipment manufacturers'  
2 bulletins and shop drawings are acceptable. Information submitted must include  
3 the following:

4 A1.8.2.1. Exterior and interior dimensions of control equipment, ductwork, etc.

5 A1.8.2.2. Size and location of all emission points.

6 A1.8.2.3. Height and inside dimensions of all stacks.

7 A1.8.2.4. Dimensions and characteristics of all fans and pumps, including flow rate,  
8 temperature, total net discharge head or static pressure, horsepower and RPM.

9 A1.8.2.5. Flow diagrams for air pollution control processes.

10 A1.8.3. The rated and operating efficiency of air pollution control equipment.

11 The total quantity of gases exhausted to the atmosphere and the emissions of  
12 air pollutants to the atmosphere. The temperature, and the barometric pressure  
13 shall be given for all gas flow. Where spray nozzles are used as control  
14 devices, pressure drop, water requirements in gallons per minute per nozzle,  
15 location and direction of spray shall be shown. All process materials entering  
16 the equipment must be stated and the maximum hourly quantities given. A sieve  
17 analysis of all particulate solids must be given.

18 A1.8.4. A description of fuel use for pollution control purposes including the  
19 type used, the maximum average quantity used per hour, and higher heating value  
20 of the fuel. For solid fuels and fuel oils, state the sulfur and ash content.  
21 Furnish description of fuel-burning equipment (e.g., fume incinerators, etc.).

22 A1.8.5. Furnish evidence that operation of the new pollution control equipment  
23 will not violate any ambient air quality standards, PSD increments, or emission  
24 standards for hazardous air pollutants.

25 A1.8.6. Evidence that methods for liquid and solid waste disposal of wastes  
26 emanating from the pollution control device have been approved, where required,

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ARIZONA DEPARTMENT OF HEALTH SERVICES  
DIVISION OF ENVIRONMENTAL HEALTH SERVICES  
BUREAU OF AIR QUALITY CONTROL  
1740 West Adams Street  
Phoenix, Arizona 85007  
Phone: (602) 255-1144

APPLICATION FOR INSTALLATION PERMIT

(As required by Title 36, Chapter 3, Article 1, Section 36-1707.01.C., Arizona Revised Statutes, and Section R9-3-301., Title 9, Chapter 3, Article 3, Arizona Administrative Rules and Regulations)

1. Permit to be issued to (Business License Name of Organization that is to Receive Permit)  
\_\_\_\_\_
2. Name (or names) of Owner, Principals, or Statutory Agents doing business as the above organization.  
\_\_\_\_\_
3. Mailing Address \_\_\_\_\_
4. Equipment Location \_\_\_\_\_
5. Type of Organization - ☐ Corporation ☐ Individual Owner  
☐ Partnership ☐ Government Agency
6. Permit Application Reason - ☐ Begin Installation of New Equipment  
☐ Modify Existing Equipment ☐ Transfer Existing Equipment  
☐ Change of Location of Ownership
7. Permit Type - ☐ Class A (Major Source) ☐ Class B (Pollution Control Equipment)
8. Classify Area in which Equipment is Located:  
Particulate ☐ Unclassifiable ☐ Nonattainment ☐ Attainment, Class \_\_\_\_\_  
Sulfur Dioxide ☐ Unclassifiable ☐ Nonattainment ☐ Attainment, Class \_\_\_\_\_  
Carbon Monoxide ☐ Unclassifiable ☐ Nonattainment ☐ Attainment  
Oxidants ☐ Unclassifiable ☐ Nonattainment ☐ Attainment
9. General Nature of Business \_\_\_\_\_
10. Equipment Description \_\_\_\_\_
11. If the organization is acquiring air pollution control device(s) and wishes to apply for certification of the device(s) in accordance with Section 43-123.02.C., Arizona Revised Statutes, check here ☐ -
12. Signature of Responsible Member of Organization \_\_\_\_\_  
Official Title of Signer \_\_\_\_\_  
Typed or Printed Name of Signer \_\_\_\_\_  
Date \_\_\_\_\_ Telephone Number \_\_\_\_\_

1 Part 40. Appendix 2 to the Arizona State Rules and Regulations for Air Pollution  
2 Control is repealed and a new Appendix 2 is added as follows:  
3

4 APPENDIX 2

5 FILING INSTRUCTIONS FOR OPERATING PERMIT APPLICATION

6 A2.1. Applications for operating permits required by A.R.S. § 36-1707.01.B. and  
7 Section R9-3-306., Title 9, Chapter 3, Arizona Administrative Rules and Regula-  
8 tions shall be filed in accordance with these instructions.

9 A2.2. Operating Permit applications shall be prepared in duplicate and shall be  
10 filed after completion of construction and testing of the equipment for which  
11 an installation permit was issued.

12 A2.2.1. A single operating permit may cover a number of pieces of articles,  
13 machines, equipment or other contrivances which may cause, contribute to,  
14 eliminate, reduce or control the emission of air pollutants where the fore-  
15 going are used on a single piece of property or pieces of property contiguous  
16 or connected by a non-public right-of-way.

17 A2.2.2. Where more than a single article, machine, equipment item, etc., is to  
18 be covered by a single permit each such article, equipment item, etc., must  
19 be listed in the permit request.

20 A2.2.3. Where various installation permits have been granted and equipment is  
21 installed piecemeal, new pieces of equipment may be covered under an original  
22 operating permit if these are additionally submitted for approval.

23 A2.2.4. No permit application shall be considered properly filed until the  
24 Director has determined that all the required supplementary information has  
25 been submitted.

26 A2.2.5. Operating permits must be renewed annually, using Form AP-100 B for

1 application. Any change in the information submitted in accordance with  
2 these instructions must be included with the application.

3 A2.3. All applications for operating permit shall be made by completing Appli-  
4 cation Form AP-100 B as follows:

5 A2.3.1. Item #1 requires the business license name of the applicant for the  
6 permit.

7 A2.3.2. Item #2 requires the name of the owner or principals doing business as  
8 identified in Item #1, if applicable.

9 A2.3.3. Item #3 requires the mailing address of the applicant identified in  
10 Item #1.

11 A2.3.4. Item #4 requires the address of the location where the equipment is to  
12 be operated.

13 A2.3.5. Item #5 provides information on the type of organization applying for  
14 the permit and Item #6 states the reason for the application. Both items  
15 require only a check mark in the appropriate box.

16 A2.3.6. Item #7 requires a brief description of the organization's activities,  
17 e.g., sand and gravel processing, manufacturing acids, asphaltic concrete pro-  
18 duction, etc.

19 A2.3.7. Item #8 requires a brief description of all equipment for which permits  
20 are required, e.g., serial numbers, model numbers, description, i.e., crusher,  
21 dryer, screening unit, baghouse, etc. Use additional paper if necessary.

22 A2.3.8. Item #9 is applicable if the equipment was operated or installed under  
23 a previous permit. It requires the name of the organization that operated or  
24 installed the equipment and the previous Arizona State Division of Air Pollution  
25 Control permit number.

26 A2.3.9. Item #10 is applicable if the organization, in accordance with Section

1 43-123.01(c), Arizona Revised Statutes, wishes to amortize expenditures incurred  
2 in the acquisition of air pollution control devices for a period of sixty  
3 months as a deduction for corporate income taxes. A certificate from the  
4 Arizona Department of Health Services is required to be attached to the State  
5 tax return in order to claim this deduction. To obtain tax certification  
6 application, check the appropriate box in Item #10.

7 A2.3.10. Item #11 requires the signature and title of a legally responsible  
8 member of the organization and Item #12 requires the name of the signer typed  
9 or printed, the date the application was signed and the telephone number at  
10 which the signer can be contacted.

11 A2.4. The information for mobile or portable equipment or sources required by  
12 Appendix 1 if not previously submitted, must be submitted in duplicate with  
13 the application. Where such information has been previously submitted with  
14 the installation permit application, it shall be so noted.

15 A2.4.1. Unless otherwise specifically approved by the Director, only one  
16 collective operating permit will be issued to each owner of mobile or portable  
17 crushers and screens. One separate permit will be issued for each asphalt  
18 plant.

19 A2.4.2. Furnish a complete list of all mobile or portable equipment units  
20 which may be used separately or may attach to different other equipment.  
21 Include name, make, size, type, serial number and present location.

22 A2.4.3. Furnish evidence that each unit of equipment has successfully passed  
23 either a mass emissions test, if applicable, (i.e., emits from a stack) or,  
24 if not applicable, a visual determination of the opacity of emissions, both  
25 performed in accordance with the Arizona Testing Manual for Air Pollutant  
26 Emissions and observed by a representative of the Arizona Bureau of Air Quality



1 Control. A waiver of mass emission tests for certain equipment may be granted,  
2 upon request, by the Director and shall be evidenced in writing.

3 A2.4.4. Furnish records of any ambient air monitoring or mass emissions monitoring  
4 required by previous permit (either installation or operating).

5 A2.5. For all stationary sources under Arizona Department of Health Services  
6 jurisdiction, that information required by Appendix 1, if not previously sub-  
7 mitted in duplicate with the application. Where such information has been  
8 previously submitted with the installation permit application, it shall be so  
9 noted.

10 A2.5.1. Unless otherwise specially approved by the Director, only one operating  
11 permit will be issued for all equipment with contiguous property. Copper  
12 Smelters shall be an exception to this rule, in that a separate permit shall  
13 be issued for the smelter which does not include permitted mine and mill  
14 facilities on the same property. Furnish a site description of property to  
15 be covered by permit.

16 A2.5.2. Furnish a complete inventory of all stationary machines, equipment,  
17 devices, boilers, incinerators, or other articles, the use of which may cause,  
18 contribute to, eliminate, reduce or control the emission of air pollutants and  
19 which are located on the property to be covered by the permit. Include name,  
20 make, size, type, serial number and location.

21 A2.5.3. Furnish a complete inventory of any mobile equipment (e.g., haul trucks,  
22 locomotives, etc.) the use of which causes or contributes to the emission of  
23 air pollutants. Include name, make, type, size, serial number and estimate  
24 of emissions.

25 A2.5.4. Furnish evidence that each unit of equipment has successfully passed  
26 all applicable mass emission or opacity tests performed in accordance with the

1 Arizona Testing Manual for Air Pollutant Emissions and observed by a repre-  
2 sentative of the Arizona Bureau of Air Quality Control, or furnish a waiver  
3 of tests, in writing, as approved by the Director.

4 A2.5.5. Furnish records of any ambient air monitoring, mass emissions monitoring  
5 or report of research program as required by previous permit (either installa-  
6 tion or operating).  
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ARIZONA DEPARTMENT OF HEALTH SERVICES  
Bureau of Air Quality Control - Division of Environmental Health Services  
1740 West Adams Street - Phoenix, AZ 85007 - Phone: (602) 255-1144

## APPLICATION FOR OPERATING PERMIT

(As required by Title 36, Chapter 14, Article 1, Section 36-1707.01, C., Arizona Revised Statutes)

1. Permit to be issued to (Business License Name of Organization that is to Receive Permit) \_\_\_\_\_
2. Name (or names) of Owner, Principals, or statutory agents doing business as the above organization \_\_\_\_\_
3. Mailing Address \_\_\_\_\_
4. Equipment Location \_\_\_\_\_
5. Type of Organization - ☐ Corporation ☐ Partnership ☐ Individual Owner ☐ Government Agency
6. Permit Application Reason - ☐ Begin Operation of New Equipment ☐ Continue Operation of Existing Equipment  
☐ Transfer (change of location or ownership)
7. General Nature of Business \_\_\_\_\_
8. Equipment Description \_\_\_\_\_
9. If this equipment had a previous written permit, state name of corporation, company or individual owner that operated this equipment and state previous Bureau of Air Quality Control Permit Number.  
Name \_\_\_\_\_ Permit Number \_\_\_\_\_
10. If the organization is acquiring air pollution control device(s) and wishes to apply for certification of the device(s) in accordance with Section 43-123.02, C., Arizona Revised Statutes, check here ☐
11. Signature of Responsible Member of Organization \_\_\_\_\_  
Official Title of Signer \_\_\_\_\_
12. Typed or Printed Name of Signer \_\_\_\_\_  
Date \_\_\_\_\_ Telephone number \_\_\_\_\_

1 Part 41. The foregoing rules and amendments shall become effective  
2 immediately upon being filed with the Arizona Secretary of State.

3 Dated this 25<sup>th</sup> day of July, 1979.  
4

5 ARIZONA DEPARTMENT OF HEALTH SERVICES  
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9 Ted Williams  
10 Deputy Director  
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